ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

	COMPOUND	UNITS	120	200		201		202		203		204	
WF10	CONDUCTIVITY (FIELD)	UMHOS		~~170~~		~~170~~		~~550~~		~~300~~		~~300~~	
WM01	SILVER BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM02	ALUMINUM BY ICAP	UG/L		200	U	280	U	200	U	380	U	350	U
WM03	ARSENIC BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM04	BARIUM BY ICAP	UG/L		200	U	200	U	200	U	200	U	200	U
WM05	BERYLLIUM BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM06	CADMIUM BY ICAP	UG/L		5 0	U	5 0	U	5 2	U	5 0	U	5 0	U
WM07	COBALT BY ICAP	UG/L		50	U	50	U	50	U	50	U	50	U
WM08	CHROMIUM BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM09	COPPER BY ICAP	UG/L		25	U	25	U	25	U	25	U	25	U
WM10	IRON BY ICAP	UG/L		260		360		280		550		530	
WM11	MANGANESE BY ICAP	UG/L		59		54		300		75		89	
WM12	MOLYBDENUM BY ICAP	UG/L		N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM13	NICKEL BY ICAP	UG/L		40	U	40	U	40	U	40	U	40	U
WM14	LEAD BY ICAP	UG/L		3 0	U	3 0	U	61		15		37	
WM15	ANTIMONY BY ICAP	UG/L		60	U	60	U	60	U	60	U	60	U
WM16	SELENIUM BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM17	TITANIUM BY ICAP	UG/L		N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM18	THALLIUM BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM19	VANADIUM BY ICAP	UG/L		50	U	50	U	50	U	50	U	50	U
WM20	ZINC BY ICAP	UG/L		20	U	74		1300		44		81	
WM21	CALCIUM TOTAL BY ICAP	MG/L		31		30		130		33		41	
WM22	MAGNESIUM TOTAL BY ICAP	MG/L		18		18		51		18		23	
WM23	SODIUM TOTAL BY ICAP	MG/L		5 0	U	5 0	U	5 3		5 0	U	5 0	U
WM24	POTASSIUM TOTAL BY ICAP	MG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM35	SILVER DISSOLVED BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	120	200 D		201 D		202 D		203 D		204 D	
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L		200	U	200	U	200	U	200	U	200	U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM38 BARIUM DISSOLVED BY ICAP	UG/L		200	U	200	U	200	U	200	U	200	U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM41 COBALT DISSOLVED BY ICAP	UG/L		50	U	50	U	50	U	50	U	50	U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM43 COPPER DISSOLVED BY ICAP	UG/L		25	U	25	U	25	U	25	U	25	U
WM44 IRON DISSOLVED BY ICAP	UG/L		100	U	100	U	100	U	100	U	100	U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L		15	U	20		210		21		35	
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L		N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM47 NICKEL DISSOLVED BY ICAP	UG/L		40	U	40	U	40	U	40	U	40	U
WM48 LEAD DISSOLVED BY ICAP	UG/L		3 0	U	3 0	U	23		3 0	U	3 3	U
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L		60	U	60	U	60	U	60	U	60	U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L		N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L		10	U	10	U	10	U	10	U	10	U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L		50	U	50	U	50	U	50	U	50	U
WM54 ZINC DISSOLVED BY ICAP	UG/L		20	U	20	U	1200		20	U	44	
WM55 CALCIUM DISSOLVED BY ICAP	MG/L		32		31		130		35		43	
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L		19		18		53		19		24	
WM57 SODIUM DISSOLVED BY ICAP	MG/L		5 0	U	5 0	U	5 6		5 0	U	5 0	U
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
ZZ01 SAMPLE NUMBER	NA	120	200		201		202		203		204	
ZZ02 ACTIVITY CODE	NA	CSXCR	CSXCR		CSXCR		CSXCR		CSXCR		CSXCR	

F-23 80

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

	COMPOUND	UNITS	205		206		207		208		208L	208R
WF01	WATER TEMP		[redacted]									
WF05	PH FIELD		[redacted]									
WF10	CONDUCTIVITY (FIELD)		[redacted]									
WM01	SILVER	BY ICAP	UG/L	10	U	10	U	10	U	10	U	
WM02	ALUMINUM	BY ICAP	UG/L	220	U	240	U	200	U	240	U	
WM03	ARSENIC	BY ICAP	UG/L	10	U	10	U	10	U	10	U	
WM04	BARIUM	BY ICAP	UG/L	200	U	200	U	200	U	200	U	
WM05	BERYLLIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	
WM06	CADMIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	
WM07	COBALT	BY ICAP	UG/L	50	U	50	U	50	U	50	U	
WM08	CHROMIUM	BY ICAP	UG/L	10	U	10	U	10	U	10	U	
WM09	COPPER	BY ICAP	UG/L	25	U	25	U	25	U	25	U	
WM10	IRON	BY ICAP	UG/L	330		340		270		310		
WM11	MANGANESE	BY ICAP	UG/L	78		74		75		67		
WM12	MOLYBDENUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	
WM13	NICKEL	BY ICAP	UG/L	40	U	40	U	40	U	40	U	
WM14	LEAD	BY ICAP	UG/L	29		32		34		33		
WM15	ANTIMONY	BY ICAP	UG/L	60	U	60	U	60	U	60	U	
WM16	SELENIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	
WM17	TITANIUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	
WM18	THALLIUM	BY ICAP	UG/L	10	U	10	U	10	U	10	U	
WM19	VANADIUM	BY ICAP	UG/L	50	U	50	U	50	U	50	U	
WM20	ZINC	BY ICAP	UG/L	74		84		100		98		
WM21	CALCIUM TOTAL	BY ICAP	MG/L	41		42		42		42		
WM22	MAGNESIUM TOTAL	BY ICAP	MG/L	23		24		24		23		
WM23	SODIUM TOTAL	BY ICAP	MG/L	5 0	U	5 0	U	5 0	U	5 0	U	

ED 8-23-90

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	205 Q		206)		207 Q		208 P		208L		208R	
WM24 POTASSIUM TOTAL BY ICAP	MG/L	5 0	U	5 0	U	5 0	U	5 0	U				
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	50	
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U	200	U	200	U	2000	
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	40	
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U	200	U	200	U	2000	
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	50	
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	50	
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U	50	U	50	U	500	
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	200	
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U	25	U	25	U	25	U	25	U	250	
WM44 IRON DISSOLVED BY ICAP	UG/L	1900		100	U	100	U	100	U	100	U	1000	
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	50		38		38		35		37		500	
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U	40	U	40	U	40	U	40	U	500	
WM48 LEAD DISSOLVED BY ICAP	UG/L	3 0	U	3 0	U	3 9	U	4 0		3 7		20	
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U	60	U	60	U	60	U	60	U	500	
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	10	
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	50	
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U	50	U	50	U	500	
WM54 ZINC DISSOLVED BY ICAP	UG/L	41		56		68		68		69		500	
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	43		43		43		45		45		N/A	O
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	24		24		24		25		25		N/A	O
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	N/A	O
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	N/A	O
ZZ01 SAMPLE NUMBER	NA	205		206		207		208		208		208	

ED
F 23-90

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND		UNITS	208S	209		210		211		212		212D
WF01 WATER TEMP		C		[illegible]		[illegible]		[illegible]		25		
WF05 PH FIELD		SU		[illegible]		[illegible]		[illegible]		[illegible]		
WF10 CONDUCTIVITY (FIELD)		UMHOS		[illegible]		[illegible]		[illegible]		[illegible]		
WM01 SILVER	BY ICAP	UG/L		10	U	10	U	10	U	10	U	
WM02 ALUMINUM	BY ICAP	UG/L		250	U	200	U	250	U	200	U	
WM03 ARSENIC	BY ICAP	UG/L		10	U	10	U	10	U	10	U	
WM04 BARIUM	BY ICAP	UG/L		200	U	200	U	200	U	200	U	
WM05 BERYLLIUM	BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	
WM06 CADMIUM	BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	
WM07 COBALT	BY ICAP	UG/L		50	U	50	U	50	U	50	U	
WM08 CHROMIUM	BY ICAP	UG/L		10	U	10	U	10	U	10	U	
WM09 COPPER	BY ICAP	UG/L		25	U	25	U	25	U	25	U	
WM10 IRON	BY ICAP	UG/L		320		240		320		260		
WM11 MANGANESE	BY ICAP	UG/L		62		280		81		57		
WM12 MOLYBDENUM	BY ICAP	UG/L		N/A	O	N/A	O	N/A	O	N/A	O	
WM13 NICKEL	BY ICAP	UG/L		40	U	40	U	40	U	40	U	
WM14 LEAD	BY ICAP	UG/L		31		6 0		26		29		
WM15 ANTIMONY	BY ICAP	UG/L		60	U	60	U	60	U	60	U	
WM16 SELENIUM	BY ICAP	UG/L		5 0	U	5 0	U	5 0	U	5 0	U	
WM17 TITANIUM	BY ICAP	UG/L		N/A	O	N/A	O	N/A	O	N/A	O	
WM18 THALLIUM	BY ICAP	UG/L		10	U	10	U	10	U	10	U	
WM19 VANADIUM	BY ICAP	UG/L		50	U	50	U	50	U	50	U	
WM20 ZINC	BY ICAP	UG/L		98		42		62		120		
WM21 CALCIUM TOTAL	BY ICAP	MG/L		42		92		40		43		
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L		24		53		23		24		
WM23 SODIUM TOTAL	BY ICAP	MG/L		5 0	U	8 9		5 0	U	5 0	U	

8 23 90

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	208S	209	210	211	212	212D
WM24 POTASSIUM TOTAL BY ICAP	MG/L		5 0 U	5 0 U	5 0 U	5 0 U	•
WM35 SILVER DISSOLVED BY ICAP	UG/L	55	10 U	10 U	10 U	10 U	10 U
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	2000	200 U	200 U	200 U	200 U	200 U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	44	10 U	10 U	10 U	10 U	10 U
WM38 BARIUM DISSOLVED BY ICAP	UG/L	2100	200 U	200 U	200 U	200 U	200 U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	47	5 0 U	5 0 U	5 0 U	5 0 U	5 0 U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	58	5 0 U	5 0 U	5 0 U	5 0 U	5 0 U
WM41 COBALT DISSOLVED BY ICAP	UG/L	510	50 U	50 U	50 U	50 U	50 U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	230	10 U	10 U	10 U	10 U	10 U
WM43 COPPER DISSOLVED BY ICAP	UG/L	250	25 U	25 U	25 U	25 U	25 U
WM44 IRON DISSOLVED BY ICAP	UG/L	1200	100 U	100 U	100 U	100 U	100 U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	560	39	230	58	36	35
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A O	N/A O	N/A O	N/A O	N/A O	N/A O
WM47 NICKEL DISSOLVED BY ICAP	UG/L	550	40 U	40 U	40 U	40 U	40 U
WM48 LEAD DISSOLVED BY ICAP	UG/L	20	4 5	3 0 U	3 0 U	4 4	4 8
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	510	60 U	60 U	60 U	60 U	60 U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	10	5 0 U	5 0 U	5 0 U	5 0 U	5 0 U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A O	N/A O	N/A O	N/A O	N/A O	N/A O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	56	10 U	10 U	10 U	10 U	10 U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	510	50 U	50 U	50 U	50 U	50 U
WM54 ZINC DISSOLVED BY ICAP	UG/L	570	86	20 U	34 U	100	99
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	N/A O	47	98	43	46	43
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	N/A O	27	57	24	26	24
WM57 SODIUM DISSOLVED BY ICAP	MG/L	N/A O	5 0 U	9 7	5 0 U	5 0 U	5 0 U
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	N/A O	5 0 U	5 0 U	5 0 U	5 0 U	5 0 U
ZZ01 SAMPLE NUMBER	NA	208	209	210	211	212	212

SD
8 23-8

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND		UNITS	213		214		215		215L		215R		215S	
WF01 WATER TEMP		C	[redacted]											
WF05 PH FIELD		SU	[redacted]											
WF10 CONDUCTIVITY (FIELD)		UMHOS	[redacted]											
WM01 SILVER	BY ICAP	UG/L	10	U	10	U	10	U	10	U	50		57	
WM02 ALUMINUM	BY ICAP	UG/L	200	U	220	U	200	U	200	U	2000		2100	
WM03 ARSENIC	BY ICAP	UG/L	10	U	10	U	10	U	10	U	40		40	
WM04 BARIUM	BY ICAP	UG/L	200	U	200	U	200	U	200	U	2000		2000	
WM05 BERYLLIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	50		49	
WM06 CADMIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	50		54	
WM07 COBALT	BY ICAP	UG/L	50	U	50	U	50	U	50	U	500		480	
WM08 CHROMIUM	BY ICAP	UG/L	10	U	10	U	10	U	10	U	200		190	
WM09 COPPER	BY ICAP	UG/L	25	U	25	U	25	U	25	U	250		240	
WM10 IRON	BY ICAP	UG/L	100	U	260		18		170		1000		1100	
WM11 MANGANESE	BY ICAP	UG/L	60		56		50		50		500		530	
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM13 NICKEL	BY ICAP	UG/L	40	U	40	U	40	U	40	U	500		520	
WM14 LEAD	BY ICAP	UG/L	28		30		27		28		20		48	
WM15 ANTIMONY	BY ICAP	UG/L	60	U	60	U	60	U	60	U	500		520	
WM16 SELENIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	10		8 6	
WM17 TITANIUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM18 THALLIUM	BY ICAP	UG/L	10	U	10	U	10	U	10	U	50		50	
WM19 VANADIUM	BY ICAP	UG/L	50	U	50	U	50	U	50	U	500		480	
WM20 ZINC	BY ICAP	UG/L	130	U	130		150		150		500		640	
WM21 CALCIUM TOTAL	BY ICAP	MG/L	46		43		48		48		N/A	0	N/A	0
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	26		24		27		27000		N/A	0	N/A	0
WM23 SODIUM TOTAL	BY ICAP	MG/L	5 0	U	5 0	U	5 0	U	5 0	U	N/A	0	N/A	0

8 13-9

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	213		214		215		215L		215R		215S	
WM24 POTASSIUM TOTAL BY ICAP	MG/L	5 0	U	5 0	U	5 0	U	5 0	U	N/A	0	N/A	0
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U						
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U						
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U						
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U						
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U						
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U						
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U						
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U						
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U	25	U	25	U						
WM44 IRON DISSOLVED BY ICAP	UG/L	100	U	100	U	100	U						
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	35		34		15	U						
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	0	N/A	0	N/A	0						
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U	40	U	40	U						
WM48 LEAD DISSOLVED BY ICAP	UG/L	5 4		5 7		16							
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U	60	U	60	U						
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U						
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	0	N/A	0	N/A	0						
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U						
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U						
WM54 ZINC DISSOLVED BY ICAP	UG/L	110		130		130							
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	47		50		93							
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	26		28		50							
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 0	U	5 0	U	23							
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	5 0	U	5 0	U	5 0	U						
ZZ01 SAMPLE NUMBER	NA	213		214		215		215		215		215	

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND		UNITS	216		217		218		219		219L		219R	
WF01 WATER TEMP		C	~~07~~		~~22~~		~~21~~		~~25~~					
WF05 PH FIELD		SU	~~8.06~~		~~7.58~~		~~7.34~~		~~7.46~~					
WF10 CONDUCTIVITY (FIELD)		UMHOS	~~840~~		~~650~~		~~205~~		~~215~~					
WM01 SILVER	BY ICAP	UG/L	10	U	10	U	10	U	10	U	N/A	0	N/A	0
WM02 ALUMINUM	BY ICAP	UG/L	200	U	220	U	200	U	360	U	N/A	0	N/A	0
WM03 ARSENIC	BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	40	
WM04 BARIUM	BY ICAP	UG/L	200	U	200	U	200	U	200	U	N/A	0	N/A	0
WM05 BERYLLIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	N/A	0	N/A	0
WM06 CADMIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	N/A	0	N/A	0
WM07 COBALT	BY ICAP	UG/L	50	U	50	U	50	U	50	U	N/A	0	N/A	0
WM08 CHROMIUM	BY ICAP	UG/L	10	U	10	U	12	U	10	U	N/A	0	N/A	0
WM09 COPPER	BY ICAP	UG/L	25	U	25	U	25	U	25	U	N/A	0	N/A	0
WM10 IRON	BY ICAP	UG/L	100	U	290		770		450		N/A	0	N/A	0
WM11 MANGANESE	BY ICAP	UG/L	20		62		17		73		N/A	0	N/A	0
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM13 NICKEL	BY ICAP	UG/L	40	U	40	U	40	U	40	U	N/A	0	N/A	0
WM14 LEAD	BY ICAP	UG/L	32		49		22		3 0	U	28		20	
WM15 ANTIMONY	BY ICAP	UG/L	60	U	60	U	60	U	60	U	N/A	0	N/A	0
WM16 SELENIUM	BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	10	
WM17 TITANIUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM18 THALLIUM	BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	50	
WM19 VANADIUM	BY ICAP	UG/L	50	U	50	U	50	U	50	U	N/A	0	N/A	0
WM20 ZINC	BY ICAP	UG/L	120		130		34	U	20	U	N/A	0	N/A	0
WM21 CALCIUM TOTAL	BY ICAP	MG/L	86		50		71		34		N/A	0	N/A	0
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	46		27		44		15		N/A	0	N/A	0
WM23 SODIUM TOTAL	BY ICAP	MG/L	22		5 3		71		5 0	U	N/A	0	N/A	0

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	216 D		217 D		218 D		219 D		219L		219R	
WM24 POTASSIUM TOTAL BY ICAP	MG/L	5 0	U	5 0	U	14		5 0	U	N/A	O	N/A	O
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U				
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U	200	U				
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U				
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U	200	U				
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U				
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U				
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U	50	U				
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U	18	U	10	U	10	U				
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U	25	U	25	U	25	U				
WM44 IRON DISSOLVED BY ICAP	UG/L	100	U	100	U	100	U	100	U				
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	44		15	U	35		36					
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O				
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U	40	U	40	U	40	U				
WM48 LEAD DISSOLVED BY ICAP	UG/L	9 5		11		3 0	U	8 2	J				
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U	60	U	60	U	60	U				
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U				
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O				
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U				
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U	50	U				
WM54 ZINC DISSOLVED BY ICAP	UG/L	100		31	U	20	U	62					
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	54		77		37		53					
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	30		48		16		29					
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 9		76		5 0	U	6 1					
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	5 0	U	16		5 0	U	5 0	U				
Z201 SAMPLE NUMBER	NA	216		217		218		219		219		219	

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND		UNITS	219S		220		220L		220R		220S		221
WF01 WATER TEMP		C			26								
WF05 PH FIELD		SU			7.4								
WF10 CONDUCTIVITY (FIELD)		UMHOS			810								
WM01 SILVER	BY ICAP	UG/L	N/A	O	10	U	10	U	50		55		
WM02 ALUMINUM	BY ICAP	UG/L	N/A	O	210		200	U	2000		2200		
WM03 ARSENIC	BY ICAP	UG/L	44		10	U	N/A	O	N/A	O	N/A	O	
WM04 BARIUM	BY ICAP	UG/L	N/A	O	200	U	200	U	2000		2200		
WM05 BERYLLIUM	BY ICAP	UG/L	N/A	O	5.0	U	5.0	U	50		47		
WM06 CADMIUM	BY ICAP	UG/L	N/A	O	5.0	U	5.0	U	50		62		
WM07 COBALT	BY ICAP	UG/L	N/A	O	50	U	50	U	500		510		
WM08 CHROMIUM	BY ICAP	UG/L	N/A	O	10	U	10	U	200		200		
WM09 COPPER	BY ICAP	UG/L	N/A	O	25	U	25	U	250		250		
WM10 IRON	BY ICAP	UG/L	N/A	O	340		330		1000		1300		
WM11 MANGANESE	BY ICAP	UG/L	N/A	O	99		99		500		610		
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	
WM13 NICKEL	BY ICAP	UG/L	N/A	O	40	U	40	U	500		510		
WM14 LEAD	BY ICAP	UG/L	44		49	J	69		500		620		
WM15 ANTIMONY	BY ICAP	UG/L	N/A	O	60	U	60	U	500		520		
WM16 SELENIUM	BY ICAP	UG/L	12		5.0	U	N/A	O	N/A	O	N/A	O	
WM17 TITANIUM	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	
WM18 THALLIUM	BY ICAP	UG/L	48		10	U	N/A	O	N/A	O	N/A	O	
WM19 VANADIUM	BY ICAP	UG/L	N/A	O	50	U	50	U	500		510		
WM20 ZINC	BY ICAP	UG/L	N/A	O	70		68		500		580		
WM21 CALCIUM TOTAL	BY ICAP	MG/L	N/A	O	51		51		N/A	O	N/A	O	
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	N/A	O	28		28		N/A	O	N/A	O	
WM23 SODIUM TOTAL	BY ICAP	MG/L	N/A	O	6.3		6.3		N/A	O	N/A	O	

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	219S	220	220L	220R	220S	221
WM24 POTASSIUM TOTAL BY ICAP	MG/L	N/A O	5 0 U	5 0 U	N/A O	N/A O	
WM35 SILVER DISSOLVED BY ICAP	UG/L		10 U				
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L		200 U				
WM37 ARSENIC DISSOLVED BY ICAP	UG/L		10 U				
WM38 BARIUM DISSOLVED BY ICAP	UG/L		200 U				
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L		5 0 U				
WM40 CADMIUM DISSOLVED BY ICAP	UG/L		5 0 U				
WM41 COBALT DISSOLVED BY ICAP	UG/L		50 U				
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L		10 U				
WM43 COPPER DISSOLVED BY ICAP	UG/L		25 U				
WM44 IRON DISSOLVED BY ICAP	UG/L		100 U				
WM45 MANGANESE DISSOLVED BY ICAP	UG/L		43				
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L		N/A O				
WM47 NICKEL DISSOLVED BY ICAP	UG/L		40 U				
WM48 LEAD DISSOLVED BY ICAP	UG/L		11 J				
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L		60 U				
WM50 SELENIUM DISSOLVED BY ICAP	UG/L		5 0 U				
WM51 TITANIUM DISSOLVED BY ICAP	UG/L		N/A O				
WM52 THALLIUM DISSOLVED BY ICAP	UG/L		10 U				
WM53 VANADIUM DISSOLVED BY ICAP	UG/L		50 U				
WM54 ZINC DISSOLVED BY ICAP	UG/L		39				
WM55 CALCIUM DISSOLVED BY ICAP	MG/L		51				
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L		28				
WM57 SODIUM DISSOLVED BY ICAP	MG/L		6 5				
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L		5 0 U				
ZZ01 SAMPLE NUMBER	NA	219	220	220	220	220	221

EV
8 23-20

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND		UNITS	300		301		301L		301R		301S		302	
WF01 WATER TEMP		C	~~23~~		~~17~~								~~28~~	
WF05 PH FIELD		SU	~~8.00~~		~~7.46~~								~~8.25~~	
WF10 CONDUCTIVITY (FIELD)		UMHOS	~~600~~		~~550~~								~~600~~	
WM01 SILVER	BY ICAP	UG/L	10	U	10	U	N/A	0	N/A	0	N/A	0	10	U
WM02 ALUMINUM	BY ICAP	UG/L	250		200	U	N/A	0	N/A	0	N/A	0	790	
WM03 ARSENIC	BY ICAP	UG/L	10	U	10	U	N/A	0	N/A	0	N/A	0	10	U
WM04 BARIUM	BY ICAP	UG/L	200	U	200	U	N/A	0	N/A	0	N/A	0	200	U
WM05 BERYLLIUM	BY ICAP	UG/L	5 0	U	5 0	U	N/A	0	N/A	0	N/A	0	5 0	U
WM06 CADMIUM	BY ICAP	UG/L	5 5		5 0	U	N/A	0	N/A	0	N/A	0	5 0	U
WM07 COBALT	BY ICAP	UG/L	50	U	50	U	N/A	0	N/A	0	N/A	0	50	U
WM08 CHROMIUM	BY ICAP	UG/L	10	U	10	U	N/A	0	N/A	0	N/A	0	10	U
WM09 COPPER	BY ICAP	UG/L	25	U	25	U	N/A	0	N/A	0	N/A	0	25	U
WM10 IRON	BY ICAP	UG/L	1700		100	U	N/A	0	N/A	0	N/A	0	2100	
WM11 MANGANESE	BY ICAP	UG/L	360		15	U	N/A	0	N/A	0	N/A	0	570	
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM13 NICKEL	BY ICAP	UG/L	40	U	53		N/A	0	N/A	0	N/A	0	40	U
WM14 LEAD	BY ICAP	UG/L	250	J	36	J	N/A	0	N/A	0	N/A	0	86	J
WM15 ANTIMONY	BY ICAP	UG/L	60	U	60	U	N/A	0	N/A	0	N/A	0	60	U
WM16 SELENIUM	BY ICAP	UG/L	5 0	U	5 0	U	N/A	0	N/A	0	N/A	0	5 0	U
WM17 TITANIUM	BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM18 THALLIUM	BY ICAP	UG/L	10	U	10	U	N/A	0	N/A	0	N/A	0	10	U
WM19 VANADIUM	BY ICAP	UG/L	50	U	50	U	N/A	0	N/A	0	N/A	0	50	U
WM20 ZINC	BY ICAP	UG/L	3400		180		N/A	0	N/A	0	N/A	0	98	
WM21 CALCIUM TOTAL	BY ICAP	MG/L	130		110		N/A	0	N/A	0	N/A	0	130	
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	52		64		N/A	0	N/A	0	N/A	0	59	
WM23 SODIUM TOTAL	BY ICAP	MG/L	5 0	U	9 8		N/A	0	N/A	0	N/A	0	5 0	U

2D
8-23-20

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND		UNITS	300		301		301L		301R		301S		302	
WM24 POTASSIUM TOTAL BY ICAP		MG/L	6 0		5 0	U	N/A	O	N/A	O	N/A	O	5 0	U
WM35 SILVER DISSOLVED	BY ICAP	UG/L	10	U	10	U							10	U
WM36 ALUMINUM DISSOLVED	BY ICAP	UG/L	200	U	200	U							200	U
WM37 ARSENIC DISSOLVED	BY ICAP	UG/L	10	U	10	U							10	U
WM38 BARIUM DISSOLVED	BY ICAP	UG/L	200	U	200	U							200	U
WM39 BERYLLIUM DISSOLVED	BY ICAP	UG/L	5 0	U	5 0	U							5 0	U
WM40 CADMIUM DISSOLVED	BY ICAP	UG/L	5 0	U	5 0	U							5 0	U
WM41 COBALT DISSOLVED	BY ICAP	UG/L	50	U	50	U							50	U
WM42 CHROMIUM DISSOLVED	BY ICAP	UG/L	10	U	10	U							10	U
WM43 COPPER DISSOLVED	BY ICAP	UG/L	25	U	25	U							25	U
WM44 IRON DISSOLVED	BY ICAP	UG/L	100	U	100	U							100	U
WM45 MANGANESE DISSOLVED	BY ICAP	UG/L	15	U	15	U							350	
WM46 MOLYBDENUM DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O							N/A	O
WM47 NICKEL DISSOLVED	BY ICAP	UG/L	40	U	60								40	U
WM48 LEAD DISSOLVED	BY ICAP	UG/L	N/A	I	33	J							N/A	I
WM49 ANTIMONY DISSOLVED	BY ICAP	UG/L	60	U	60	U							60	U
WM50 SELENIUM DISSOLVED	BY ICAP	UG/L	5 0	U	5 0	U							5 0	U
WM51 TITANIUM DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O							N/A	O
WM52 THALLIUM DISSOLVED	BY ICAP	UG/L	10	U	10	U							10	U
WM53 VANADIUM DISSOLVED	BY ICAP	UG/L	50	U	50	U							50	U
WM54 ZINC DISSOLVED	BY ICAP	UG/L	1900		190								27	
WM55 CALCIUM DISSOLVED	BY ICAP	MG/L	120		110								130	
WM56 MAGNESIUM DISSOLVED	BY ICAP	MG/L	49		66								59	
WM57 SODIUM DISSOLVED	BY ICAP	MG/L	5 0	U	10								5 0	U
WM58 POTASSIUM DISSOLVED	BY ICAP	MG/L	5 0	U	5 0	U							5 0	U
ZZ01 SAMPLE NUMBER		NA	300		301		301		301		301		302	

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ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

	COMPOUND	UNITS	303		304		305		306		307		308	
WF01	WATER TEMP	C	~~.00~~		~~.05~~		~~.21~~		~~.05~~		~~.17~~		~~.19~~	
WF05	PH FIELD	SU	~~7.07~~		~~7.57~~		~~10.62~~		~~7.39~~		6.92		6.97	
WF10	CONDUCTIVITY (FIELD)	UMHOS	~~1400~~		~~600~~		~~9400~~		~~1400~~		~~550~~		~~600~~	
WM01	SILVER BY ICAP	UG/L	14		10	U	10	U	10	U	10	U	10	U
WM02	ALUMINUM BY ICAP	UG/L	29000		200	U	200	U	200	U	200	U	200	U
WM03	ARSENIC BY ICAP	UG/L	21		10	U	10	U	10	U	10	U	10	U
WM04	BARIUM BY ICAP	UG/L	510	U	200	U	200	U	200	U	200	U	200	U
WM05	BERYLLIUM BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM06	CADMIUM BY ICAP	UG/L	190		5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM07	COBALT BY ICAP	UG/L	85		50	U	50	U	400		50	U	50	U
WM08	CHROMIUM BY ICAP	UG/L	30		10	U	10	U	10	U	10	U	10	U
WM09	COPPER BY ICAP	UG/L	140		25	U	25	U	25	U	25	U	25	U
WM10	IRON BY ICAP	UG/L	75000		370		100	U	2000		100	U	100	U
WM11	MANGANESE BY ICAP	UG/L	8 9		51		93		2200		15	U	15	U
WM12	MOLYBDENUM BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM13	NICKEL BY ICAP	UG/L	92		40	U	40	U	310		40	U	40	U
WM14	LEAD BY ICAP	UG/L	14000	J	63	J	5 1	J	330	J	17	J	3 0	U
WM15	ANTIMONY BY ICAP	UG/L	60	U	60	U	60	U	60	U	60	U	60	U
WM16	SELENIUM BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM17	TITANIUM BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM18	THALLIUM BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	10	U
WM19	VANADIUM BY ICAP	UG/L	81		50	U	50	U	50	U	50	U	50	U
WM20	ZINC BY ICAP	UG/L	9100		200		20	U	8900		140		26	
WM21	CALCIUM TOTAL BY ICAP	MG/L	460		110		430		260		110		62	
WM22	MAGNESIUM TOTAL BY ICAP	MG/L	210		60		73		130		61		46	
WM23	SODIUM TOTAL BY ICAP	MG/L	6 1		7 7		57		24		7 9		14	

EV
1 23-20

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND	UNITS	303		304		305		306		307		308	
WM24 POTASSIUM TOTAL BY ICAP	MG/L	12		5 0	U	110		11		5 0	U	5 0	U
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	10	U
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U	200	U	200	U	200	U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	10	U
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U	200	U	200	U	200	U	200	U	200	U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U	400		50	U	50	U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	10	U
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U	25	U	25	U	25	U	25	U	25	U
WM44 IRON DISSOLVED BY ICAP	UG/L	100	U	100	U	100	U	100	U	100	U	100	U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	1800		15	U	15	U	2200		15	U	15	U
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U	40	U	40	U	320		43		40	U
WM48 LEAD DISSOLVED BY ICAP	UG/L	N/A	I	20	J	N/A	I	29	J	14	J	N/A	I
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U	60	U	60	U	60	U	60	U	60	U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U	5 0	U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	10	U	10	U	10	U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U	50	U	50	U	50	U	50	U	50	U
WM54 ZINC DISSOLVED BY ICAP	UG/L	65		160		20	U	6400		140		31	
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	230		110		390		270		110		67	
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	89		60		5 0	U	130		65		50	
WM57 SODIUM DISSOLVED BY ICAP	MG/L	6 5		7 9		58		25		8 1		15	
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	8 1		5 0	U	110		12		5 0	U	5 0	U
ZZ01 SAMPLE NUMBER	NA	303		304		305		306		307		308	

2
8-23-90

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND		UNITS	309		309D		309L	309R	309S	310	
WF01 WATER TEMP		C	~~18~~							~~15~~	
WF05 PH FIELD		SU	~~6.56~~							~~6.70~~	
WF10 CONDUCTIVITY (FIELD)		UMHOS	~~1400~~							~~900~~	
WM01 SILVER	BY ICAP	UG/L	10	U	10	U				10	U
WM02 ALUMINUM	BY ICAP	UG/L	470		420					200	U
WM03 ARSENIC	BY ICAP	UG/L	59		59					25	
WM04 BARIUM	BY ICAP	UG/L	210		210					200	U
WM05 BERYLLIUM	BY ICAP	UG/L	5.0	U	5.0	U				5.0	U
WM06 CADMIUM	BY ICAP	UG/L	6.9		8.0					5.0	U
WM07 COBALT	BY ICAP	UG/L	50	U	50	U				50	U
WM08 CHROMIUM	BY ICAP	UG/L	10	U	10	U				10	U
WM09 COPPER	BY ICAP	UG/L	25	U	25	U				25	U
WM10 IRON	BY ICAP	UG/L	12		12					750	
WM11 MANGANESE	BY ICAP	UG/L	200		200					120	
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	O	N/A	O				N/A	O
WM13 NICKEL	BY ICAP	UG/L	61		49					40	U
WM14 LEAD	BY ICAP	UG/L	680	J	650	J				23	J
WM15 ANTIMONY	BY ICAP	UG/L	60	U	60	U				60	U
WM16 SELENIUM	BY ICAP	UG/L	5.0	U	5.0	U				5.0	U
WM17 TITANIUM	BY ICAP	UG/L	N/A	O	N/A	O				N/A	O
WM18 THALLIUM	BY ICAP	UG/L	10	U	10	U				10	U
WM19 VANADIUM	BY ICAP	UG/L	50	U	50	U				50	U
WM20 ZINC	BY ICAP	UG/L	850		830					94	
WM21 CALCIUM TOTAL	BY ICAP	MG/L	220		220					210	
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	64		64					72	
WM23 SODIUM TOTAL	BY ICAP	MG/L	63		63					5.0	U

C-
8 23-90

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND	UNITS	309	309D	309L	309R	309S	310
WM24 POTASSIUM TOTAL BY ICAP	MG/L	27	28				5 8
WM35 SILVER DISSOLVED BY ICAP	UG/L	10 U	10 U	10 U	50	44	10 U
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200 U	200 U	200 U	2000	2200	200 U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	37	37	36	40	40	17
WM38 BARIUM DISSOLVED BY ICAP	UG/L	210	210	210	2000	2400	200 U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0 U	5 0 U	5 0 U	50	51	5 0 U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0 U	5 0 U	5 0 U	50	57	5 0 U
WM41 COBALT DISSOLVED BY ICAP	UG/L	50 U	50 U	50 U	500	550	50 U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10 U	10 U	10 U	200	210	10 U
WM43 COPPER DISSOLVED BY ICAP	UG/L	25 U	25 U	25 U	250	260	25 U
WM44 IRON DISSOLVED BY ICAP	UG/L	7900	8200	7900	1000	8700	510
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	170	180	170	500	710	130
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A O	N/A O	N/A O	N/A O	N/A O	N/A O
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40 U	40 U	43	500	560	40 U
WM48 LEAD DISSOLVED BY ICAP	UG/L	4 1 U	3 3 U	3 3	20	22	3 0 U
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60 U	60 U	60 U	500	570	60 U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0 U	5 0 U	5 0 U	10	6 1	5 0 U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A O	N/A O	N/A O	N/A O	N/A O	N/A O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10 U	10 U	10 U	50	46	10 U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50 U	50 U	50 U	500	550	50 U
WM54 ZINC DISSOLVED BY ICAP	UG/L	520	550	520	500	1100	290
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	230	240	220	N/A O	N/A O	220
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	67	70	66	N/A O	N/A O	77
WM57 SODIUM DISSOLVED BY ICAP	MG/L	68	71	66	N/A O	N/A O	5 0 U
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	28	30	28	N/A O	N/A O	5 7
ZZ01 SAMPLE NUMBER	NA	309	309	309	309	309	310

8 23-2

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND		UNITS	311		312		313	314		315		316	
WF01 WATER TEMP		C	~~17~~		~~16~~			~~25~~		~~25~~		~~20~~	
WF05 PH FIELD		SU	~~6.56~~		~~6.45~~			~~7.15~~		~~7.05~~		~~6.93~~	
WF10 CONDUCTIVITY (FIELD)		UMHOS	~~1400~~		~~700~~			~~470~~		~~420~~		~~600~~	
WM01 SILVER	BY ICAP	UG/L	10	U	10	U		10	U	10	U	10	U
WM02 ALUMINUM	BY ICAP	UG/L	1800		200	U		2800		2900		5200	
WM03 ARSENIC	BY ICAP	UG/L	64		110			14		14		46	
WM04 BARIUM	BY ICAP	UG/L	200	U	200	U		200	U	200	U	200	U
WM05 BERYLLIUM	BY ICAP	UG/L	5 0	U	5 0	U		5 0	U	5 0	U	5 0	U
WM06 CADMIUM	BY ICAP	UG/L	11		37			5 0	U	8 6		30	
WM07 COBALT	BY ICAP	UG/L	50	U	350			85		56		170	
WM08 CHROMIUM	BY ICAP	UG/L	10	U	10	U		10	U	10	U	10	U
WM09 COPPER	BY ICAP	UG/L	25	U	28	U		78	U	140		240	
WM10 IRON	BY ICAP	UG/L	51		36			11000		15000		67	
WM11 MANGANESE	BY ICAP	UG/L	6900		370			1400		1800		9000	
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	O	N/A	O		N/A	O	N/A	O	N/A	O
WM13 NICKEL	BY ICAP	UG/L	64		680			83		70		170	
WM14 LEAD	BY ICAP	UG/L	5000	J	9300	J		1700	J	3800	J	8200	J
WM15 ANTIMONY	BY ICAP	UG/L	60	U	60	U		60	U	60	U	66	U
WM16 SELENIUM	BY ICAP	UG/L	5 0	U	5 0	U		5 0	U	5 0	U	5 0	U
WM17 TITANIUM	BY ICAP	UG/L	N/A	O	N/A	O		N/A	O	N/A	O	N/A	O
WM18 THALLIUM	BY ICAP	UG/L	10	U	10	U		10	U	10	U	10	U
WM19 VANADIUM	BY ICAP	UG/L	50	U	50	U		50	U	50	U	50	U
WM20 ZINC	BY ICAP	UG/L	530		26			470		560		2500	
WM21 CALCIUM TOTAL	BY ICAP	MG/L	470		270			150		120		450	
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	220		87			68		71		270	
WM23 SODIUM TOTAL	BY ICAP	MG/L	5 0	U	7 3			5 0	U	5 0	U	5 0	U

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND	UNITS	311		312		313	314		315		316	
WM24 POTASSIUM TOTAL BY ICAP	MG/L	6 9		9 8			5 3		5 9		12	
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U	10	U		10	U	10	U	10	U
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	200	U		200	U	200	U	200	U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	34		10	U		10	U	10	U	10	U
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U	200	U		200	U	200	U	200	U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U		5 0	U	5 0	U	5 0	U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U	27			5 0	U	5 0	U	5 0	U
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U	360			55		50	U	50	U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U	10	U		10	U	10	U	10	U
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U	25	U		25	U	25	U	25	U
WM44 IRON DISSOLVED BY ICAP	UG/L	9300		100	U		100	U	100	U	100	U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	340		180			96		45		70	
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O		N/A	O	N/A	O	N/A	O
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U	620			43		40	U	40	U
WM48 LEAD DISSOLVED BY ICAP	UG/L	3 0	U	60			74		9 3		46	
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U	60	U		60	U	60	U	60	U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U		5 0	U	5 0	U	5 0	U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O		N/A	O	N/A	O	N/A	O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U	10	U		10	U	10	U	10	U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U	50	U		50	U	50	U	50	U
WM54 ZINC DISSOLVED BY ICAP	UG/L	20	U	23000			170		20	U	450	
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	160		270			93		46		61	
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	47		88			40		35		62	
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 0	U	7 6			5 0	U	5 0	U	5 0	U
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	5 0	U	10			5 0	U	5 0	U	7 5	
ZZ01 SAMPLE NUMBER	NA	311		312		313	314		315		316	

SW 8 23-30

21)

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

	COMPOUND	UNITS	317		318		318L	318R	318S	319	
WF01	WATER TEMP	C	~~20~~		~~17~~					~~10~~	
WF05	PH FIELD	SU	~~7.11~~		~~7.04~~					~~6.64~~	
WF10	CONDUCTIVITY (FIELD)	UMHOS	~~700~~		~~550~~					~~650~~	
WM01	SILVER BY ICAP	UG/L	10	U	10	U				10	U
WM02	ALUMINUM BY ICAP	UG/L	4100		200	U				200	U
WM03	ARSENIC BY ICAP	UG/L	85		10	U				10	U
WM04	BARIUM BY ICAP	UG/L	200	U	200	U				200	U
WM05	BERYLLIUM BY ICAP	UG/L	5 0	U	5 0	U				5 0	U
WM06	CADMIUM BY ICAP	UG/L	26		5 0	U				5 0	U
WM07	COBALT BY ICAP	UG/L	53		50	U				50	U
WM08	CHROMIUM BY ICAP	UG/L	10	U	10	U				10	U
WM09	COPPER BY ICAP	UG/L	44	U	25	U				25	U
WM10	IRON BY ICAP	UG/L	66		170	U				140	U
WM11	MANGANESE BY ICAP	UG/L	8900		46					22	
WM12	MOLYBDENUM BY ICAP	UG/L	N/A	O	N/A	O				N/A	O
WM13	NICKEL BY ICAP	UG/L	60		52					40	U
WM14	LEAD BY ICAP	UG/L	10000	J	63	J				43	J
WM15	ANTIMONY BY ICAP	UG/L	60	U	60	U				60	U
WM16	SELENIUM BY ICAP	UG/L	5 0	U	5 0	U				5 0	U
WM17	TITANIUM BY ICAP	UG/L	N/A	O	N/A	O				N/A	O
WM18	THALLIUM BY ICAP	UG/L	10	U	10	U				10	U
WM19	VANADIUM BY ICAP	UG/L	50	U	50	U				50	U
WM20	ZINC BY ICAP	UG/L	1400		180					170	
WM21	CALCIUM TOTAL BY ICAP	MG/L	450		110					120	
WM22	MAGNESIUM TOTAL BY ICAP	MG/L	270		62					77	
WM23	SODIUM TOTAL BY ICAP	MG/L	5 0	U	9 5					14	

SV
8 23-90

22

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND	UNITS	317		318		318L		318R		318S		319	
WM24 POTASSIUM TOTAL BY ICAP	MG/L	10		5 0	U							7 0	
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U	10	U	N/A	0	N/A	0	N/A	0	10	U
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	200	U	N/A	0	N/A	0	N/A	0	200	U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	51		10	U	10	U	40		38		10	U
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U	200	U	N/A	0	N/A	0	N/A	0	200	U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	N/A	0	N/A	0	N/A	0	5 0	U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	N/A	0	N/A	0	N/A	0	5 0	U
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U	50	U	N/A	0	N/A	0	N/A	0	50	U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	N/A	0	N/A	0	N/A	0	10	U
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U	25	U	N/A	0	N/A	0	N/A	0	25	U
WM44 IRON DISSOLVED BY ICAP	UG/L	100	U	100	U	N/A	0	N/A	0	N/A	0	100	U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	43		22		N/A	0	N/A	0	N/A	0	15	U
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U	86		N/A	0	N/A	0	N/A	0	40	U
WM48 LEAD DISSOLVED BY ICAP	UG/L	3 0	U	28		61		20		50		4 4	U
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U	60	U	N/A	0	N/A	0	N/A	0	60	U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U	5 0	U	5 0	U	10		5 3		5 0	U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U	10	U	10	U	50		73		10	U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U	50	U	N/A	0	N/A	0	N/A	0	50	U
WM54 ZINC DISSOLVED BY ICAP	UG/L	20	U	160		N/A	0	N/A	0	N/A	0	450	
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	84		110		N/A	0	N/A	0	N/A	0	120	
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	89		64		N/A	0	N/A	0	N/A	0	81	
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 0	U	9 8		N/A	0	N/A	0	N/A	0	45	
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	7 0		5 0	U	N/A	0	N/A	0	N/A	0	6 4	
ZZ01 SAMPLE NUMBER	NA	317		318		318		318		318		319	

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

	COMPOUND	UNITS	319L		319R	319S	320	320F		321
WM01	SILVER BY ICAP	UG/L						10	U	
WM02	ALUMINUM BY ICAP	UG/L						200	U	
WM03	ARSENIC BY ICAP	UG/L						10	U	
WM04	BARIUM BY ICAP	UG/L						200	U	
WM05	BERYLLIUM BY ICAP	UG/L						5 0	U	
WM06	CADMIUM BY ICAP	UG/L						5 0	U	
WM07	COBALT BY ICAP	UG/L						50	U	
WM08	CHROMIUM BY ICAP	UG/L						10	U	
WM09	COPPER BY ICAP	UG/L						25	U	
WM10	IRON BY ICAP	UG/L						100	U	
WM11	MANGANESE BY ICAP	UG/L						15	U	
WM12	MOLYBDENUM BY ICAP	UG/L						N/A	O	
WM13	NICKEL BY ICAP	UG/L						40	U	
WM14	LEAD BY ICAP	UG/L						N/A	I	
WM15	ANTIMONY BY ICAP	UG/L						60	U	
WM16	SELENIUM BY ICAP	UG/L						5 0	U	
WM17	TITANIUM BY ICAP	UG/L						N/A	O	
WM18	THALLIUM BY ICAP	UG/L						10	U	
WM19	VANADIUM BY ICAP	UG/L						50	U	
WM20	ZINC BY ICAP	UG/L						20	U	
WM21	CALCIUM TOTAL BY ICAP	MG/L						5 0[1]	U	
WM22	MAGNESIUM TOTAL BY ICAP	MG/L						5 0	U	
WM23	SODIUM TOTAL BY ICAP	MG/L						5 0	U	
WM24	POTASSIUM TOTAL BY ICAP	MG/L						5 0	U	
WM35	SILVER DISSOLVED BY ICAP	UG/L	10	U	50	52				
WM36	ALUMINUM DISSOLVED BY ICAP	UG/L	200	U	2000	2000				

2
8 13-90

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND		UNITS	319L		319R		319S		320	320F	321
WM37 ARSENIC DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O			
WM38 BARIUM DISSOLVED	BY ICAP	UG/L	200	U	2000		2000				
WM39 BERYLLIUM DISSOLVED	BY ICAP	UG/L	5 0	U	50		46				
WM40 CADMIUM DISSOLVED	BY ICAP	UG/L	5 0	U	50		56				
WM41 COBALT DISSOLVED	BY ICAP	UG/L	50	U	500		470				
WM42 CHROMIUM DISSOLVED	BY ICAP	UG/L	10	U	200		180				
WM43 COPPER DISSOLVED	BY ICAP	UG/L	25	U	250		240				
WM44 IRON DISSOLVED	BY ICAP	UG/L	140		1000		1100				
WM45 MANGANESE DISSOLVED	BY ICAP	UG/L	19		500		490				
WM46 MOLYBDENUM DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O			
WM47 NICKEL DISSOLVED	BY ICAP	UG/L	40	U	500		490				
WM48 LEAD DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O			
WM49 ANTIMONY DISSOLVED	BY ICAP	UG/L	60	U	500		470				
WM50 SELENIUM DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O			
WM51 TITANIUM DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O			
WM52 THALLIUM DISSOLVED	BY ICAP	UG/L	N/A	O	N/A	O	N/A	O			
WM53 VANADIUM DISSOLVED	BY ICAP	UG/L	50	U	500		480				
WM54 ZINC DISSOLVED	BY ICAP	UG/L	170		500		640				
WM55 CALCIUM DISSOLVED	BY ICAP	MG/L	120		N/A	O	N/A	O			
WM56 MAGNESIUM DISSOLVED	BY ICAP	MG/L	77		N/A	O	N/A	O			
WM57 SODIUM DISSOLVED	BY ICAP	MG/L	14		N/A	O	N/A	O			
WM58 POTASSIUM DISSOLVED	BY ICAP	MG/L	7 4		N/A	O	N/A	O			
ZZ01 SAMPLE NUMBER		NA	319		319		319		320	320	321
ZZ02 ACTIVITY CODE		NA	CSXCR		CSXCR		CSXCR		CSXCR	CSXCR	CSXCR

EW
4 23-20

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND		UNITS	321F		322		322F		323		323F		324	
WF01 WATER TEMP		C											~~15~~	
WF05 PH FIELD		SU											~~7.10~~	
WF10 CONDUCTIVITY (FIELD)		UMHOS											~~700~~	
WM01 SILVER	BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM02 ALUMINUM	BY ICAP	UG/L	200	U			200	U			200	U	200	U
WM03 ARSENIC	BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM04 BARIUM	BY ICAP	UG/L	200	U			200	U			200	U	200	U
WM05 BERYLLIUM	BY ICAP	UG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM06 CADMIUM	BY ICAP	UG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM07 COBALT	BY ICAP	UG/L	50	U			50	U			50	U	50	U
WM08 CHROMIUM	BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM09 COPPER	BY ICAP	UG/L	25	U			25	U			25	U	25	U
WM10 IRON	BY ICAP	UG/L	100	U			100	U			100	U	100	U
WM11 MANGANESE	BY ICAP	UG/L	15	U			15	U			15	U	15	U
WM12 MOLYBDENUM	BY ICAP	UG/L	N/A	O			N/A	O			N/A	O	N/A	O
WM13 NICKEL	BY ICAP	UG/L	40	U			40	U			40	U	51	
WM14 LEAD	BY ICAP	UG/L	N/A	I			3 2	J			N/A	I	37	J
WM15 ANTIMONY	BY ICAP	UG/L	60	U			60	U			60	U	60	U
WM16 SELENIUM	BY ICAP	UG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM17 TITANIUM	BY ICAP	UG/L	N/A	O			N/A	O			N/A	O	N/A	O
WM18 THALLIUM	BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM19 VANADIUM	BY ICAP	UG/L	50	U			50	U			50	U	50	U
WM20 ZINC	BY ICAP	UG/L	20	U			20	U			20	U	160	
WM21 CALCIUM TOTAL	BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	110	
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	62	
WM23 SODIUM TOTAL	BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	9 2	

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND	UNITS	321F		322		322F	T,D	323		323F	B	324	B
WM24 POTASSIUM TOTAL BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM35 SILVER DISSOLVED BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM36 ALUMINUM DISSOLVED BY ICAP	UG/L	200	U			200	U			200	U	200	U
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U			200	U			200	U	200	U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U			50	U			50	U	50	U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U			25	U			25	U	25	U
WM44 IRON DISSOLVED BY ICAP	UG/L	100	U			100	U			100	U	100	U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	15	U			15	U			15	U	15	U
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O			N/A	O			N/A	O	N/A	O
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U			40	U			40	U	88	
WM48 LEAD DISSOLVED BY ICAP	UG/L	3 0	U			3 0	U			3 0	U	28	
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U			60	U			60	U	60	U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U			5 0	U			5 0	U	5 0	U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O			N/A	O			N/A	O	N/A	O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U			10	U			10	U	10	U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U			50	U			50	U	50	U
WM54 ZINC DISSOLVED BY ICAP	UG/L	20	U			20	U			20	U	170	
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	110	
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	65	
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	9 7	
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	5 0	U			5 0	U			5 0	U	5 0	U
ZZ01 SAMPLE NUMBER	NA	321		322		322		323		323		324	

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8 23-80

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

	COMPOUND	UNITS	324F	T D	325	325F	T
WM01	SILVER BY ICAP	UG/L	10	U		10	U
WM02	ALUMINUM BY ICAP	UG/L	200	U		200	U
WM03	ARSENIC BY ICAP	UG/L	10	U		10	U
WM04	BARIUM BY ICAP	UG/L	200	U		200	U
WM05	BERYLLIUM BY ICAP	UG/L	5 0	U		5 0	U
WM06	CADMIUM BY ICAP	UG/L	5 0	U		5 0	U
WM07	COBALT BY ICAP	UG/L	50	U		50	U
WM08	CHROMIUM BY ICAP	UG/L	10	U		10	U
WM09	COPPER BY ICAP	UG/L	25	U		25	U
WM10	IRON BY ICAP	UG/L	100	U		100	U
WM11	MANGANESE BY ICAP	UG/L	15	U		15	U
WM12	MOLYBDENUM BY ICAP	UG/L	N/A	O		N/A	O
WM13	NICKEL BY ICAP	UG/L	40	U		40	U
WM14	LEAD BY ICAP	UG/L	N/A	I		N/A	I
WM15	ANTIMONY BY ICAP	UG/L	60	U		60	U
WM16	SELENIUM BY ICAP	UG/L	5 0	U		5 0	U
WM17	TITANIUM BY ICAP	UG/L	N/A	O		N/A	O
WM18	THALLIUM BY ICAP	UG/L	10	U		10	U
WM19	VANADIUM BY ICAP	UG/L	50	U		50	U
WM20	ZINC BY ICAP	UG/L	27			20	U
WM21	CALCIUM TOTAL BY ICAP	MG/L	5 0	U		5 0	U
WM22	MAGNESIUM TOTAL BY ICAP	MG/L	5 0	U		5 0	U
WM23	SODIUM TOTAL BY ICAP	MG/L	5 0	U		5 0	U
WM24	POTASSIUM TOTAL BY ICAP	MG/L	5 0	U		5 0	U
WM35	SILVER DISSOLVED BY ICAP	UG/L	10	U			
WM36	ALUMINUM DISSOLVED BY ICAP	UG/L	200	U			

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8 23-90

ANALYSIS REQUEST SUPPLEMENT REPORT ACTIVITY O-CSXCR DATE 08/22/9

COMPOUND	UNITS	324F	D	325	325F
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	10	U		
WM38 BARIUM DISSOLVED BY ICAP	UG/L	200	U		
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	5 0	U		
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	5 0	U		
WM41 COBALT DISSOLVED BY ICAP	UG/L	50	U		
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	10	U		
WM43 COPPER DISSOLVED BY ICAP	UG/L	25	U		
WM44 IRON DISSOLVED BY ICAP	UG/L	100	U		
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	15	U		
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O		
WM47 NICKEL DISSOLVED BY ICAP	UG/L	40	U		
WM48 LEAD DISSOLVED BY ICAP	UG/L	3 0	U		
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	60	U		
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	5 0	U		
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O		
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	10	U		
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	50	U		
WM54 ZINC DISSOLVED BY ICAP	UG/L	20	U		
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	5 0	U		
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	5 0	U		
WM57 SODIUM DISSOLVED BY ICAP	MG/L	5 0	U		
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	5 0	U		
ZZ01 SAMPLE NUMBER	NA	324		325	325
ZZ02 ACTIVITY CODE	NA	CSXCR		CSXCR	CSXCR

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8 23 90

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

	COMPOUND	UNITS	443	444	445	446	448	908M T
WM01 SILVER	BY ICAP	UG/L						10 U
WM02 ALUMINUM	BY ICAP	UG/L						200 U
WM03 ARSENIC	BY ICAP	UG/L						10 U
WM04 BARIUM	BY ICAP	UG/L						200 U
WM05 BERYLLIUM	BY ICAP	UG/L						5 0 U
WM06 CADMIUM	BY ICAP	UG/L						5 0 U
WM07 COBALT	BY ICAP	UG/L						50 U
WM08 CHROMIUM	BY ICAP	UG/L						10 U
WM09 COPPER	BY ICAP	UG/L						25 U
WM10 IRON	BY ICAP	UG/L						100 U
WM11 MANGANESE	BY ICAP	UG/L						15 U
WM12 MOLYBDENUM	BY ICAP	UG/L						N/A O
WM13 NICKEL	BY ICAP	UG/L						40 U
WM14 LEAD	BY ICAP	UG/L						3 0 U
WM15 ANTIMONY	BY ICAP	UG/L						60 U
WM16 SELENIUM	BY ICAP	UG/L						5 0 U
WM17 TITANIUM	BY ICAP	UG/L						N/A O
WM18 THALLIUM	BY ICAP	UG/L						10 U
WM19 VANADIUM	BY ICAP	UG/L						50 U
WM20 ZINC	BY ICAP	UG/L						20 U
WM21 CALCIUM TOTAL	BY ICAP	MG/L						5 0 U
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L						5 0 U
WM23 SODIUM TOTAL	BY ICAP	MG/L						5 0 U
WM24 POTASSIUM TOTAL	BY ICAP	MG/L						5 0 U
ZZ01 SAMPLE NUMBER		NA	443	444	445	446	448	908
ZZ02 ACTIVITY CODE		NA	CSXCR	CSXCR	CSXCR	CSXCR	CSXCR	CSXCR

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ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

	COMPOUND	UNITS	909A ^	909C ^	910M ^	911A ^	911C ^	912M
WM01	SILVER BY ICAP	UG/L	500	500				
WM02	ALUMINUM BY ICAP	UG/L	2000	2000				
WM03	ARSENIC BY ICAP	UG/L	44	47				
WM04	BARIUM BY ICAP	UG/L	1900	2000				
WM05	BERYLLIUM BY ICAP	UG/L	470	480				
WM06	CADMIUM BY ICAP	UG/L	490	500				
WM07	COBALT BY ICAP	UG/L	480	500				
WM08	CHROMIUM BY ICAP	UG/L	500	510				
WM09	COPPER BY ICAP	UG/L	490	520				
WM10	IRON BY ICAP	UG/L	1900	2000				
WM11	MANGANESE BY ICAP	UG/L	480	500				
WM12	MOLYBDENUM BY ICAP	UG/L	N/A O	N/A O				
WM13	NICKEL BY ICAP	UG/L	460	480				
WM14	LEAD BY ICAP	UG/L	98	98				
WM15	ANTIMONY BY ICAP	UG/L	1000	980				
WM16	SELENIUM BY ICAP	UG/L	46	53				
WM17	TITANIUM BY ICAP	UG/L	N/A O	N/A O				
WM18	THALLIUM BY ICAP	UG/L	100	97				
WM19	VANADIUM BY ICAP	UG/L	470	490				
WM20	ZINC BY ICAP	UG/L	2900	3100				
WM21	CALCIUM TOTAL BY ICAP	MG/L	48	49				
WM22	MAGNESIUM TOTAL BY ICAP	MG/L	25	25				
WM23	SODIUM TOTAL BY ICAP	MG/L	49	50				
WM24	POTASSIUM TOTAL BY ICAP	MG/L	49	49				
WM35	SILVER DISSOLVED BY ICAP	UG/L			10 U	500	520	10 U
WM36	ALUMINUM DISSOLVED BY ICAP	UG/L			200 U	2000	2100	200 U

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8 23 90

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	909A	909C	910M V	911A P	911C P	912M P
WM37 ARSENIC DISSOLVED BY ICAP	UG/L			10 U	47	41	10 U
WM38 BARIUM DISSOLVED BY ICAP	UG/L			200 U	2000	2100	200 U
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L			5 0 U	480	470	5 0 U
WM40 CADMIUM DISSOLVED BY ICAP	UG/L			5 0 U	500	530	5 0 U
WM41 COBALT DISSOLVED BY ICAP	UG/L			50 U	500	520	50 U
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L			10 U	510	510	10 U
WM43 COPPER DISSOLVED BY ICAP	UG/L			25 U	520	520	25 U
WM44 IRON DISSOLVED BY ICAP	UG/L			100 U	2000	2000	100 U
WM45 MANGANESE DISSOLVED BY ICAP	UG/L			15 U	500	510	15 U
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L			N/A O	N/A O	N/A O	N/A O
WM47 NICKEL DISSOLVED BY ICAP	UG/L			40 U	480	480	40 U
WM48 LEAD DISSOLVED BY ICAP	UG/L			3 0 U	98	91	3 0 U
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L			60 U	980	970	60 U
WM50 SELENIUM DISSOLVED BY ICAP	UG/L			5 0 U	53	46	5 0 U
WM51 TITANIUM DISSOLVED BY ICAP	UG/L			N/A O	N/A O	N/A O	N/A O
WM52 THALLIUM DISSOLVED BY ICAP	UG/L			10 U	97	96	10 U
WM53 VANADIUM DISSOLVED BY ICAP	UG/L			50 U	490	500	50 U
WM54 ZINC DISSOLVED BY ICAP	UG/L			20 U	3100	3100	20 U
WM55 CALCIUM DISSOLVED BY ICAP	MG/L			5 0 U	49	52	5 0 U
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L			5 0 U	25	27	5 0 U
WM57 SODIUM DISSOLVED BY ICAP	MG/L			5 0 U	50	52	5 0 U
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L			5 0 U	49	53	5 0 U
ZZ01 SAMPLE NUMBER	NA	909	909	910	911	911	912
ZZ02 ACTIVITY CODE	NA	CSXCR	CSXCR	CSXCR	CSXCR	CSXCR	CSXCR

EP 8 23-50

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

	COMPOUND	UNITS	913A	913C	915A	915C	915M	916A
WM01 SILVER	BY ICAP	UG/L			500	500	10 U	
WM02 ALUMINUM	BY ICAP	UG/L			2000	2000	200 U	
WM03 ARSENIC	BY ICAP	UG/L			47	43	10 U	
WM04 BARIUM	BY ICAP	UG/L			2000	2000	200 U	
WM05 BERYLLIUM	BY ICAP	UG/L			480	450	5 0 U	
WM06 CADMIUM	BY ICAP	UG/L			500	500	5 0 U	
WM07 COBALT	BY ICAP	UG/L			500	490	50 U	
WM08 CHROMIUM	BY ICAP	UG/L			510	480	10 U	
WM09 COPPER	BY ICAP	UG/L			520	490	25 U	
WM10 IRON	BY ICAP	UG/L			2000	1900	100 U	
WM11 MANGANESE	BY ICAP	UG/L			500	490	15 U	
WM12 MOLYBDENUM	BY ICAP	UG/L			N/A O	N/A O	N/A O	
WM13 NICKEL	BY ICAP	UG/L			480	460	40 U	
WM14 LEAD	BY ICAP	UG/L			4800	4900	3 0 U	
WM15 ANTIMONY	BY ICAP	UG/L			980	950	60 U	
WM16 SELENIUM	BY ICAP	UG/L			53	49	5 0 U	
WM17 TITANIUM	BY ICAP	UG/L			N/A O	N/A O	N/A O	
WM18 THALLIUM	BY ICAP	UG/L			97	100	10 U	
WM19 VANADIUM	BY ICAP	UG/L			490	480	50 U	
WM20 ZINC	BY ICAP	UG/L			3100	3100	20 U	
WM21 CALCIUM TOTAL	BY ICAP	MG/L			49	50	5 0 U	
WM22 MAGNESIUM TOTAL	BY ICAP	MG/L			25	25	5 0 U	
WM23 SODIUM TOTAL	BY ICAP	MG/L			50	50	5 0 U	
WM24 POTASSIUM TOTAL	BY ICAP	MG/L			49	51	5 0 U	
WM35 SILVER DISSOLVED	BY ICAP	UG/L	500	500				500
WM36 ALUMINUM DISSOLVED	BY ICAP	UG/L	2000	2000				2000

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ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	913A	913C	915A	915C	915M	916A
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	47	43				47
WM38 BARIUM DISSOLVED BY ICAP	UG/L	2000	2000				2000
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	480	460				480
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	500	500				500
WM41 COBALT DISSOLVED BY ICAP	UG/L	500	490				500
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	510	480				510
WM43 COPPER DISSOLVED BY ICAP	UG/L	520	500				520
WM44 IRON DISSOLVED BY ICAP	UG/L	2000	2000				2000
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	500	490				500
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A 0	N/A 0				N/A 0
WM47 NICKEL DISSOLVED BY ICAP	UG/L	480	460				480
WM48 LEAD DISSOLVED BY ICAP	UG/L	97	87				98
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	980	1000				980
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	53	44				53
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A 0	N/A 0				N/A 0
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	97	98				97
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	490	480				490
WM54 ZINC DISSOLVED BY ICAP	UG/L	3100	3000				3100
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	49	49				49
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	25	25				25
WM57 SODIUM DISSOLVED BY ICAP	MG/L	50	49				50
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	49	50				49
ZZ01 SAMPLE NUMBER	NA	913	913	915	915	915	916
ZZ02 ACTIVITY CODE	NA	CSXCR	CSXCR	CSXCR	CSXCR	CSXCR	CSXCR

ED
8 23-90

ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

	COMPOUND	UNITS	916C	916M		917M	918A	918C
SM01 SILVER	BY ICAP	MG/KG				2 0	2	2
SM02 ALUMINUM	BY ICAP	MG/KG				4	3 0	3 0
SM03 ARSENIC	BY ICAP	MG/KG				2 0	9 0	8 0
SM04 BARIUM	BY ICAP	MG/KG				4	4	4
SM05 BERYLLIUM	BY ICAP	MG/KG				1 0	1	1
SM06 CADMIUM	BY ICAP	MG/KG				1 0	4	4
SM07 COBALT	BY ICAP	MG/KG				1	1 0	1 0
SM08 CHROMIUM	BY ICAP	MG/KG				2 0	1 0	9
SM09 COPPER	BY ICAP	MG/KG				5 0	6 00	6 00
SM10 IRON	BY ICAP	MG/KG				2	2 000	2 0000
SM11 MANGANESE	BY ICAP	MG/KG				3 0	2 0	2 00
SM12 MOLYBDENUM	BY ICAP	MG/KG				*	*	
SM13 NICKEL	BY ICAP	MG/KG				8 0	6	5
SM14 LEAD	BY ICAP	MG/KG				1 0	2 0	2 0
SM15 ANTIMONY	BY ICAP	MG/KG				1	2 0	2 0
SM16 SELENIUM	BY ICAP	MG/KG				1 0	3	4
SM17 TITANIUM	BY ICAP	MG/KG				*	*	*
SM18 THALLIUM	BY ICAP	MG/KG				2 0	3	3
SM19 VANADIUM	BY ICAP	MG/KG				1	6	6
SM20 ZINC	BY ICAP	MG/KG				4 0	1 0	8 0
SM21 CALCIUM	BY ICAP	MG/KG				1 00	2 0000	8 0000
SM22 MAGNESIUM	BY ICAP	MG/KG				1 000	1 0000	2 0000
SM23 SODIUM	BY ICAP	MG/KG				1 000	1 00	1 00
SM24 POTASSIUM	BY ICAP	MG/KG				1 00	1 00	1 00
WM35 SILVER DISSOLVED	BY ICAP	UG/L	530	10	U			
WM36 ALUMINUM DISSOLVED	BY ICAP	UG/L	2100	200	U			

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ANALYSIS REQUEST DETAIL REPORT ACTIVITY O-CSXCR

COMPOUND	UNITS	916C		916M		917M	918A	918C	
WM37 ARSENIC DISSOLVED BY ICAP	UG/L	42		10	U				
WM38 BARIUM DISSOLVED BY ICAP	UG/L	2100		200	U				
WM39 BERYLLIUM DISSOLVED BY ICAP	UG/L	470		5 0	U				
WM40 CADMIUM DISSOLVED BY ICAP	UG/L	530		5 0	U				
WM41 COBALT DISSOLVED BY ICAP	UG/L	520		50	U				
WM42 CHROMIUM DISSOLVED BY ICAP	UG/L	510		10	U				
WM43 COPPER DISSOLVED BY ICAP	UG/L	530		25	U				
WM44 IRON DISSOLVED BY ICAP	UG/L	2000		100	U				
WM45 MANGANESE DISSOLVED BY ICAP	UG/L	510		15	U				
WM46 MOLYBDENUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O				
WM47 NICKEL DISSOLVED BY ICAP	UG/L	490		40	U				
WM48 LEAD DISSOLVED BY ICAP	UG/L	95		3 0	U				
WM49 ANTIMONY DISSOLVED BY ICAP	UG/L	1000		60	U				
WM50 SELENIUM DISSOLVED BY ICAP	UG/L	48		5 0	U				
WM51 TITANIUM DISSOLVED BY ICAP	UG/L	N/A	O	N/A	O				
WM52 THALLIUM DISSOLVED BY ICAP	UG/L	93		10	U				
WM53 VANADIUM DISSOLVED BY ICAP	UG/L	510		50	U				
WM54 ZINC DISSOLVED BY ICAP	UG/L	3200		20	U				
WM55 CALCIUM DISSOLVED BY ICAP	MG/L	52		5 0	U				
WM56 MAGNESIUM DISSOLVED BY ICAP	MG/L	27		5 0	U				
WM57 SODIUM DISSOLVED BY ICAP	MG/L	51		5 0	U				
WM58 POTASSIUM DISSOLVED BY ICAP	MG/L	53		5 0	U				
ZZ01 SAMPLE NUMBER	NA	916		916		917	918	918	
ZZ02 ACTIVITY CODE	NA	CSXCR		CSXCR		CSXCR	CSXCR	CSXCR	

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR400		CSXCR402		CSXCR403		CSXCR404	
ALUMINUM	79		90		83		340	
ANTIMONY	12	U	12	U	12	U	12	U
ARSENIC	2 0	U	2 0	U	2 0	U	3 5	
BARIUM	40	U	40	U	40	U	7 9	
BERYLLIUM	1 0	U	1 0	U	1 0	U	1 0	U
CADMIUM	1 0	U	1 0	U	1 0	U	6 1	
CALCIUM	1000		1300		1000	U	15000	
CHROMIUM	2 0	U	2 0	U	2 1	U	1 8	U
COBALT	10	U	10	U	10	U	10	U
COPPER	97	J	66	J	81	J	44	J
IRON	140		170		120		2600	
LEAD	7 8		19		14		520	
MAGNESIUM	1000	U	1000	U	1000	U	7800	
MANGANESE	9 3		11		6 7		320	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	10	U	10	U	10	U
POTASSIUM	1000	U	1000	U	1000	U	1000	U
SELENIUM	1 2		1 6		1 5		1 0	U
SILVER	2 0	U	2 0	U	2 0	U	2 0	U
SODIUM	1000	U	1000	U	1000	U	1000	U
THALLIUM	2 0	U	2 0	U	2 0	U	2 0	U
VANADIUM	10	U	10	U	10	U	10	U
ZINC	15		20		12		240	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR406	CSXCR407	CSXCR408	CSXCR409
ALUMINUM	160	67 U	40 U	40 U
ANTIMONY	12 U	12 U	12 U	12 U
ARSENIC	2 0 U	2 0 U	2 0 U	2 0 U
BARIUM	40 U	40 U	40 U	40 U
BERYLLIUM	1 0 U	1 0 U	1 0 U	1 0 U
CADMIUM	2 3	1 0 U	1 0 U	1 1
CALCIUM	1600	1000 U	1000 U	1500
CHROMIUM	2 1 U	2 0 U	2 0 U	2 0 U
COBALT	10 U	10 U	10 U	10 U
COPPER	150 J	140 J	5 0 U	110 J
IRON	250	120	22	230
LEAD	62	8 0	1 0 U	32
MAGNESIUM	1000 U	1000 U	1000 U	1900
MANGANESE	15	7 0	3 0 U	16
MERCURY	N/A O	N/A O	N/A O	N/A O
NICKEL	10 U	10 U	10 U	10 U
POTASSIUM	1000 U	1000 U	1000 U	1000 U
SELENIUM	1 0 J	1 0 U	1 0 U	1 6
SILVER	2 0 U	2 0 U	2 0 U	2 0 U
SODIUM	1000 U	1000 U	1000 U	1000 U
THALLIUM	2 0 U	2 0 U	2 0 U	2 0 U
VANADIUM	10 U	10 U	10 U	10 U
ZINC	44	16	4 0 U	27
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR410		CSXCR411		CSXCR412		CSXCR413	
ALUMINUM	140		160		580		140	
ANTIMONY	12	U	12	U	12	U	12	U
ARSENIC	2 0	U	2 0	U	2 0	U	2 0	U
BARIUM	40	U	40	U	40	U	12	
BERYLLIUM	1 0	U	1 0	U	1 0	U	1 0	U
CADMIUM	1 0	U	1 1		8 5		1 4	
CALCIUM	2200		2300		24000		1200	
CHROMIUM	2 0	U	2 0	U	2 4	U	2 0	U
COBALT	10	U	10	U	6 5		10	U
COPPER	120	J	83	J	67	J	120	J
IRON	320		430		4300		310	
LEAD	47		57		840		58	
MAGNESIUM	3100		1900		12000		1000	U
MANGANESE	23		33		530		17	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	10	U	10	U	10	U
POTASSIUM	1000	U	1000	U	1000	U	1000	U
SELENIUM	1 2		1 4		1 0	U	1 7	
SILVER	2 0	U	2 0	U	2 0	U	2 0	U
SODIUM	1000	U	1000	U	230		1000	U
THALLIUM	2 0	U	2 0	U	2 0	U	2 0	U
VANADIUM	10	U	10	U	2 1		10	U
ZINC	30		36		400		63	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR414	CSXCR415	CSXCR416	CSXCR417
ALUMINUM	120	58	40 U	200
ANTIMONY	12 U	12 U	12 U	12 U
ARSENIC	2 0 U	2 0 U	2 0 U	2 0 U
BARIUM	3 2	40 U	40 U	40 U
BERYLLIUM	1 0 U	1 0 U	1 0 U	1 0 U
CADMIUM	1 5	1 0 U	1 0 U	1 5
CALCIUM	1000 U	1000 U	1000 U	1200
CHROMIUM	2 0 U	2 0 U	2 0 U	2 0 U
COBALT	10 U	10 U	10 U	10 U
COPPER	100 J	190 J	5 0 U	270
IRON	190	130	20 U	330
LEAD	28	21	1 1	14
MAGNESIUM	260	1000 U	1000 U	1000 U
MANGANESE	11	6 6	3 0 U	22
MERCURY	N/A O	N/A O	N/A O	N/A O
NICKEL	10 U	10 U	10 U	10 U
POTASSIUM	190	1000 U	1000 U	1000 U
SELENIUM	1 2	1 2	1 0 U	1 9
SILVER	2 0 U	2 0 U	2 0 U	2 0 U
SODIUM	250	1000 U	1000 U	1000
THALLIUM	2 0 U	2 0 U	2 0 U	2 0 U
VANADIUM	10 U	10 U	10 U	3 1
ZINC	22	24	4 0 U	28
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR418	CSXCR419	CSXCR420	CSXCR421
ALUMINUM	230	220	930	150
ANTIMONY	12 U	12 U	12 U	12 U
ARSENIC	2 0 U	2 0 U	6 0	2 0 U
BARIUM	40 U	40 U	40 U	40 U
BERYLLIUM	1 0 U	1 0 U	1 0 U	1 0 U
CADMIUM	1 7	3 0	12	1 0 U
CALCIUM	1400	1900	37000	1600
CHROMIUM	2 0 U	2 1	2 9	2 0 U
COBALT	10 U	10 U	10 U	10 U
COPPER	110	49	91	110 J
IRON	370	450	6800	360
LEAD	26	46	1400	130
MAGNESIUM	1000	1400	18000	1000 U
MANGANESE	25	30	790	24
MERCURY	N/A O	N/A O	N/A O	N/A O
NICKEL	10 U	10 U	10	10 U
POTASSIUM	1000 U	1000 U	1000 U	1000 U
SELENIUM	2 2	2 5	3 5 J	2 0
SILVER	2 0 U	2 0 U	2 0 U	2 0 U
SODIUM	1000 U	1000 U	1000 U	1000 U
THALLIUM	2 0 U	2 0 U	2 0 U	2 0 U
VANADIUM	10 U	10 U	10 U	10 U
ZINC	27	37	660	33
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER SZ
DATA FILE ~~AMC~~

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR422		CSXCR423		CSXCR424		CSXCR425	
ALUMINUM	190		110		40	U	130	
ANTIMONY	12	U	12	U	12	U	12	U
ARSENIC	2 0	U	2 0	U	2 0	U	2 0	U
BARIUM	40	U	40	U	40	U	40	U
BERYLLIUM	1 0	U	1 0	U	1 0	U	1 0	U
CADMIUM	1 0	U	1 0	U	1 0	U	1 2	
CALCIUM	1100		1000	U	1000	U	1500	
CHROMIUM	2 0	U	2 0	U	2 0	U	2 0	U
COBALT	10	U	10	U	10	U	10	U
COPPER	76	J	220	J	5 0	U	300	J
IRON	310		180		20	U	340	
LEAD	23		8 6		2 7		58	
MAGNESIUM	1000	U	1000	U	1000	U	2300	
MANGANESE	18		10		3 0	U	28	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	10	U	10	U	10	U
POTASSIUM	1000	U	1000	U	1000	U	1000	U
SELENIUM	2 1		2 0		1 0	U	2 4	J
SILVER	2 0	U	2 0	U	2 0	U	2 0	U
SODIUM	1000	U	1000	U	1000	U	1000	U
THALLIUM	2 0	U	2 0	U	2 0	U	2 0	U
VANADIUM	10	U	10	U	10	U	10	U
ZINC	22		36		4 0	U	56	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR426		CSXCR427		CSXCR428		CSXCR429	
ALUMINUM	140		160		610		160	
ANTIMONY	12	U	12	U	12	U	12	U
ARSENIC	2 0	U	2 0	U	2 0	U	2 0	U
BARIUM	40	U	40	U	40	U	40	U
BERYLLIUM	1 0	U	1 0	U	1 0	U	1 0	U
CADMIUM	1 4		1 3		9 2		1 0	U
CALCIUM	1400		2500		28000		1100	
CHROMIUM	2 0	U	2 0	U	3 1	U	2 0	U
COBALT	10	U	10	U	10	U	10	U
COPPER	88	J	63	J	66	J	100	J
IRON	330		560		4800		400	
LEAD	70		79		1100		110	
MAGNESIUM	2000		1300		14000		1000	U
MANGANESE	26		53		570		25	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	10	U	10	U	10	U
POTASSIUM	1000	U	1000	U	1000	U	1000	U
SELENIUM	1 9		2 8		1 0	U	2 5	
SILVER	2 0	U	2 0	U	2 0	U	2 0	U
SODIUM	1000	U	1000	U	1000	U	1000	U
THALLIUM	2 0	U	2 0	U	2 0	U	2 0	U
VANADIUM	10	U	10	U	10	U	10	U
ZINC	50		53		480		56	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR430		CSXCR431		CSXCR432		CSXCR433	
ALUMINUM	160		110		6 9		760	
ANTIMONY	12	U	12	U	12	U	12	U
ARSENIC	2 0	U	2 0	U	2 0	U	2 0	U
BARIUM	40	U	40	U	40	U	40	U
BERYLLIUM	1 0	U	1 0	U	1 0	U	1 0	U
CADMIUM	1 4		1 0	U	1 0	U	1 3	
CALCIUM	1000	U	1000	U	1000	U	3700	
CHROMIUM	2 0	U	2 0	U	2 0	U	3 2	
COBALT	10	U	10	U	10	U	10	U
COPPER	98	J	260	J	5 0	U	170	
IRON	250		210		22	U	920	
LEAD	38		14		1 0	U	28	
MAGNESIUM	1000	U	1000	U	1000	U	3100	
MANGANESE	14		10		3 0	U	36	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	10	U	10	U	10	U
POTASSIUM	1000	U	1000	U	1000	U	1000	U
SELENIUM	2 3		1 6		1 0	U	1 9	
SILVER	2 0	U	2 0	U	2 0	U	2 0	U
SODIUM	1000	U	1000	U	1000	U	1000	U
THALLIUM	2 0	U	2 0	U	2 0	U	2 0	U
VANADIUM	10	U	10	U	10	U	36	
ZINC	27		29		4 0	U	42	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR434		CSXCR435		CSXCR436		CSXCR437	
ALUMINUM	840		1000		930		680	
ANTIMONY	12	U	12	U	12	U	12	U
ARSENIC	2 0	U	2 7		2 0	U	2 0	U
BARIUM	40	U	40	U	40	U	40	U
BERYLLIUM	1 0	U	1 0	U	1 0	U	1 0	U
CADMIUM	1 0	U	4 7		5 0		1 0	
CALCIUM	3800		18000		13000		2500	
CHROMIUM	2 8		2 7		2 1		2 4	
COBALT	10	U	10	U	10	U	10	U
COPPER	140		130		40		110	
IRON	950		3 9		2600		950	
LEAD	24		290		440		56	
MAGNESIUM	3200		8900		6600		1100	
MANGANESE	36		400		260		39	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	9 3		10	U	10	U
POTASSIUM	1000	U	540		1000	U	1000	U
SELENIUM	3 0	J	3 4	J	1 7	J	1 8	
SILVER	2 0	U	2 0	U	2 0	U	2 0	U
SODIUM	1000	U	1000	U	1000	U	1000	U
THALLIUM	2 0	U	2 0	U	2 0	U	2 0	U
VANADIUM	37		38		10	U	10	U
ZINC	38		170		240		530	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER SP
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR438	CSXCR439	CSXCR440	CSXCR441
ALUMINUM	720	740	40 U	670
ANTIMONY	12 U	12 U	12 U	12 U
ARSENIC	2 0 U	2 0 U	2 0 U	2 0 U
BARIUM	40 U	40 U	40 U	40 U
BERYLLIUM	1 0 U	1 0 U	1 0 U	1 0 U
CADMIUM	1 0 U	1 0 U	1 0 U	1 0 U
CALCIUM	1200	1000 U	1000 U	1500
CHROMIUM	2 0 U	2 0 U	2 0 U	2 0 U
COBALT	10 U	10 U	10 U	10 U
COPPER	88	240	5 0 U	250
IRON	820	760	20 U	830
LEAD	24	17	0 76	29
MAGNESIUM	440	1000 U	1000 U	1000 U
MANGANESE	23	19	3 0 U	30
MERCURY	N/A O	N/A O	N/A O	N/A O
NICKEL	10 U	10 U	10 U	10 U
POTASSIUM	1000 U	1000 U	1000 U	1000 U
SELENIUM	1 9	1 1	1 0 U	1 7
SILVER	2 0 U	2 0 U	2 0 U	2 0 U
SODIUM	1000 U	1000 U	1000 U	1000 U
THALLIUM	2 0 U	2 0 U	2 0 U	2 0 U
VANADIUM	10 U	10 U	10 U	10 U
ZINC	27	31	4 0 U	30
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR442	CSXCR443	CSXCR444	CSXCR445
ALUMINUM	760	720	780	900
ANTIMONY	12 U	12 U	12 U	12 U
ARSENIC	2 0 U	2 0 U	2 1	2 0 U
BARIUM	40 U	40 U	40 U	40 U
BERYLLIUM	1 0 U	1 0 U	1 0 U	1 0 U
CADMIUM	1 0 U	1 0 U	1 0 U	1 0
CALCIUM	1500	2200	3500	2300
CHROMIUM	2 5	2 0 U	3 1	2 2
COBALT	10 U	10 U	10 U	10 U
COPPER	56	81	43	86
IRON	890	980	1200	1200
LEAD	15	24	170	59
MAGNESIUM	1000 U	1000 U	1500	1000 U
MANGANESE	30	49	67	49
MERCURY	N/A O	N/A O	N/A O	N/A O
NICKEL	10 U	10 U	10 U	10 U
POTASSIUM	1000 U	1000 U	1000 U	1000 U
SELENIUM	2 2	2 2	2 0	1 9
SILVER	2 0 U	2 0 U	2 0 U	2 0 U
SODIUM	1000 U	1000 U	1000 U	1000 U
THALLIUM	2 0 U	2 0 U	2 0 U	2 0 U
VANADIUM	10 U	10 U	10 U	10 U
ZINC	23	27	50	64
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS		MATRIX AIR	UNITS UG/SMPL
LAB SILVER		METHOD CS0788A	CASE 5558G
SAMPLE PREP _____	ANALYST/ENTRY DEW	REVIEWER SP	DATE 08/20/90
REVIEW LEVEL 2		DATA FILE AMC	

SAMPLES	CSXCR446	CSXCR448	CSXCR449
ALUMINUM	760	820	40 U
ANTIMONY	12 U	12 U	12 U
ARSENIC	2 0 U	2 4	2 0 U
BARIUM	11	40 U	40 U
BERYLLIUM	1 0 U	1 0 U	1 0 U
CADMIUM	1 0 U	7 3	1 0 U
CALCIUM	1500	1500	1000 U
CHROMIUM	2 1	2 3	2 0 U
COBALT	10 U	10 U	10 U
COPPER	64	140	5 0 U
IRON	890	950	40
LEAD	34	76	1 4
MAGNESIUM	1000 U	1000 U	1000 U
MANGANESE	32	32	3 0 U
MERCURY	N/A O	N/A O	N/A O
NICKEL	10 U	10 U	10 U
POTASSIUM	1000 U	1000 U	1000 U
SELENIUM	1 5	1 8	1 0 U
SILVER	2 0 U	2 0 U	2 0 U
SODIUM	1000 U	1000 U	1000 U
THALLIUM	2 0 U	2 0 U	2 0 U
VANADIUM	10 U	10 U	10 U
ZINC	25	62	4 0 U
CYANIDE	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS | MATRIX AIR | UNITS UG/SMPL
LAB SILVER | METHOD CS0788A | CASE 5558G
SAMPLE PREP _____ ANALYST/ENTRY DEW | REVIEWER _____ | DATE 08/20/90
REVIEW LEVEL 2 | DATA FILE AMC

SAMPLES	CSXCR403L	CSXCR408L	CSXCR422L	CSXCR433L
ALUMINUM	81	N/A O	180	740
ANTIMONY	12 U	N/A O	12 U	12 U
ARSENIC	N/A O	2 0 U	2 0 U	2 0 U
BARIUM	40 U	N/A O	40 U	40 U
BERYLLIUM	1 0 U	N/A O	1 0 U	1 0 U
CADMIUM	1 0 U	N/A O	1 0 U	1 1
CALCIUM	1000 U	N/A O	1100	3600
CHROMIUM	2 0 U	N/A O	2 0 U	3 5
COBALT	10 U	N/A O	10 U	10 U
COPPER	80	N/A O	75	160
IRON	120	N/A O	310	900
LEAD	16	1 0	31	34
MAGNESIUM	1000 U	N/A O	1000 U	3000
MANGANESE	6 0	N/A O	18	35
MERCURY	N/A O	N/A O	N/A O	N/A O
NICKEL	10 U	N/A O	10 U	10 U
POTASSIUM	1000 U	N/A O	1000 U	1000 U
SELENIUM	N/A O	1 0 U	2 1	1 9
SILVER	2 0 U	N/A O	2 0 U	2 0 U
SODIUM	1000 U	N/A O	1000 U	1000 U
THALLIUM	N/A O	2 0 U	N/A O	2 0 U
VANADIUM	10 U	N/A O	10 U	34
ZINC	12	N/A O	21	41
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER SD
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR900M		CSXCR901R		CSXCR901S		CSXCR902A	
ALUMINUM	40	U	N/A	O	N/A	O	320	
ANTIMONY	12	U	100		95		210	
ARSENIC	2 0	U	8 0		7 8		920	
BARIUM	40	U	400		420		4 8	
BERYLLIUM	1 0	U	10		9 9		19	
CADMIUM	1 0	U	10		11		45	
CALCIUM	1000	U	N/A	O	N/A	O	200000	
CHROMIUM	2 0	U	40		44		100	
COBALT	10	U	100		110		140	
COPPER	5 0	U	50		56		6900	
IRON	20	U	N/A	O	N/A	O	22000	
LEAD	1 0	U	100		110		240	
MAGNESIUM	1000	U	N/A	O	N/A	O	120000	
MANGANESE	3 0	U	100		110		210	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	10	U	100		110		61	
POTASSIUM	1000	U	N/A	O	N/A	O	50000	
SELENIUM	1 0	U	2 0		2 1		39	
SILVER	2 0	U	10		11		22	
SODIUM	1000	U	N/A	O	N/A	O	50000	
THALLIUM	2 0	U	10		12		39	
VANADIUM	10	U	100		110		66	
ZINC	4 0	U	100		110		190	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER Σ
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR902C		CSXCR903M		CSXCR904R		CSXCR904S	
ALUMINUM	310		40	U	N/A	O	N/A	O
ANTIMONY	230		12	U	100		100	
ARSENIC	1000		2 0	U	8 0		8 2	
BARIUM	40	U	40	U	400		420	
BERYLLIUM	18		1 0	U	10		9 6	
CADMIUM	47		1 0	U	10		12	
CALCIUM	180		1000	U	N/A	O	N/A	O
CHROMIUM	95		2 0	U	40		42	
COBALT	130		10	U	100		100	
COPPER	6700		5 0	U	50		58	
IRON	210		20	U	N/A	O	N/A	O
LEAD	240		1 0	U	100		110	
MAGNESIUM	120		1000	U	N/A	O	N/A	O
MANGANESE	200		3 0	U	100		100	
MERCURY	N/A	O	N/A	O	N/A	O	N/A	O
NICKEL	60		10	U	100		100	
POTASSIUM	1000	U	1000	U	N/A	O	N/A	O
SELENIUM	41		1 0	U	2 0		2 4	
SILVER	27		2 0	U	10		11	
SODIUM	1000	U	1000	U	N/A	O	N/A	O
THALLIUM	48		2 0	U	10		9 8	
VANADIUM	66		10	U	100		100	
ZINC	190		4 0	U	100		100	
CYANIDE	N/A	O	N/A	O	N/A	O	N/A	O
MOLYBDENUM	N/A	O	N/A	O	N/A	O	N/A	O
TITANIUM	N/A	O	N/A	O	N/A	O	N/A	O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS
LAB SILVER
SAMPLE PREP _____ ANALYST/ENTRY DEW
REVIEW LEVEL 2

MATRIX AIR
METHOD CS0788A
REVIEWER _____
DATA FILE AMC

UNITS UG/SMPL
CASE 5558G
DATE 08/20/90

SAMPLES	CSXCR905A	CSXCR905C	CSXCR906M	CSXCR907A
ALUMINUM	320	300	40 U	320
ANTIMONY	210	220	12 U	210
ARSENIC	920	1100	2 0 U	920
BARIUM	4 8	40 U	40 U	4 8
BERYLLIUM	19	17	1 0 U	19
CADMIUM	45	45	1 0 U	45
CALCIUM	200000	180000	1000 U	200000
CHROMIUM	100	93	2 0 U	100
COBALT	140	130	10 U	140
COPPER	6900	6600	5 0 U	6 9
IRON	22000	21000	20 U	22
LEAD	240	220	1 0 U	240
MAGNESIUM	120000	120000	1000 U	120000
MANGANESE	210	200	3 0 U	210
MERCURY	N/A O	N/A O	0 10 U	N/A O
NICKEL	61	60	10 U	61
POTASSIUM	50000	1000 U	1000 U	50
SELENIUM	39	32	1 0 U	39
SILVER	22	26	2 0 U	22
SODIUM	50000	1000 U	1000 U	50
THALLIUM	39	45	2 0 U	39
VANADIUM	66	64	10 U	66
ZINC	190	190	4 0 U	190
CYANIDE	N/A O	N/A O	N/A O	N/A O
MOLYBDENUM	N/A O	N/A O	N/A O	N/A O
TITANIUM	N/A O	N/A O	N/A O	N/A O

ANALYSIS TYPE METALS, TOTAL

TITLE BIG RIVER MINE TAILINGS		MATRIX AIR	UNITS UG/SMPL
LAB SILVER		METHOD CS0788A	CASE 5558G
SAMPLE PREP _____	ANALYST/ENTRY DEW	REVIEWER [signature]	DATE 08/20/90
REVIEW LEVEL 2		DATA FILE AMC	

SAMPLES	CSXCR907C	
ALUMINUM	310	
ANTIMONY	230	
ARSENIC	1000	
BARIUM	40	U
BERYLLIUM	18	
CADMIUM	46	
CALCIUM	190000	
CHROMIUM	100	
COBALT	130	
COPPER	6800	
IRON	210	
LEAD	230	
MAGNESIUM	120000	
MANGANESE	210	
MERCURY	N/A	O
NICKEL	55	
POTASSIUM	1000	U
SELENIUM	45	
SILVER	27	
SODIUM	1000	U
THALLIUM	39	
VANADIUM	67	
ZINC	190	
CYANIDE	N/A	O
MOLYBDENUM	N/A	O
TITANIUM	N/A	O

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TO Debra Morey
Data Review Task Monitor
THRU Harold Brown, Ph D
ESAT Deputy Project Officer, EPA

FROM Albert Iannacone
ESAT QA Coordinator
THRU Ronald Ross
ESAT Manager

DATE August 23, 1990
SUBJECT Review of inorganic data for **Big River Mine Tailings**

TID# 07-9003-329
ASSIGNMENT# 571
ICF ACCT# 302-26-329-02
NSI S O # 4633-3292
ESAT Doc # ESAT-VII-329 08 23-90-01

These data were reviewed according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," and the Region VII Inorganic Data Review Training Manual as guidance The following comments and attached data sheets are a result of the ESAT review of the above mentioned data from the contract laboratory

SAS CASE NO 5558G
SITE BIG RIVER MINE TAILINGS
REVIEWER Al Iannacone
MATRIX Water

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR

SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G133	CSXCR208	MGG8G141	CSXCR216
5558G134	CSXCR209	MGG8G142	CSXCR217
5558G135	CSXCR210	MGG8G143	CSXCR218
5558G136	CSXCR211	MGG8G144	CSXCR322F
5558G137	CSXCR212	MGG8G145	CSXCR323F
5558G138	CSXCR213	MGG8G146	CSXCR324
5558G139	CSXCR214	MGG8G147	CSXCR324F
5558G140	CSXCR215	MGG8G199	CSXCR212D

And six associated QC samples CSXCR916A,C,M and -208L,S,R

GENERAL

This data review assignment covers Sixteen Water samples analyzed for dissolved metals Three field blanks and one field duplicate, and six associated QC samples were included in this assignment Chain-of-custody paperwork is complete, although sample tags were absent

1 Holding Times and Preservation

A Holding time requirements and preservation requirements were met for these metals analyses

2 Calibration

A Calibration criteria were met for all samples, for both initial and continuing calibrations

3 Method Blanks / Field Blanks

Matrix	Sample #	Analytes Detected	Samples Qualified as non-detect
Water	Laboratory Blanks	Al, Cr, Cu, Fe, Tl, V	Cr in CSXCR217
Water	CSXCR322F	Ca, Na	none
Water	CSXCR323F	Mg	none
Water	CSXCR324F	Zn	CSXCR211, -217

4 Matrix Spike

A Met applicable criteria except for low % recovery for Se, no data were affected due to this occurrence

5 Interference Check Sample Met applicable criteria

6 Laboratory Control Sample Met applicable criteria

7 Duplicates

A Lab and field duplicates met applicable criteria, indicating acceptable precision was obtained during these analyses

8 **ICP Serial Dilution**

A All applicable criteria were met

9 **Furnace AA QC**

A Acceptance criteria were met, Pb was successfully analyzed by the method of standard additions for sample CSXCR324

10 **Calculations Verification**

A Due to the requested level of review, no detailed examination of calculations was performed

B Per regional guidance, low level detected data below the Contract Required Detection Limit (CRDL) were reported as nondetect at the CRDL, including in blank samples

Summary

This data package is acceptable in terms of requirements for overall accuracy, precision and completeness

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TO Debra Morey
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THRU Harold Brown, Ph D
ESAT Deputy Project Officer, EPA

FROM Albert Iannacone
ESAT QA Coordinator
THRU Ronald Ross
ESAT Manager

DATE August 22, 1990
SUBJECT Review of inorganic data for **Big River Mine Tailings**

TID# 07-9003-329
ASSIGNMENT# 570
ICF ACCT# 302-26-329-02
NSI S O # 4633-3292
ESAT Doc # ESAT-VII-329-08-23-90-02

These data were reviewed according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," and the Region VII Inorganic Data Review Training Manual as guidance The following comments and attached data sheets are a result of the ESAT review of the above mentioned data from the contract laboratory

SAS CASE NO 5558G
SITE BIG RIVER MINE TAILINGS
REVIEWER Al Iannacone
MATRIX Water

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR

SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G73	CSXCR219	MGG8G83	CSXCR308
5558G74	CSXCR220	MGG8G84	CSXCR309
5558G75	CSXCR300	MGG8G85	CSXCR309D
5558G76	CSXCR301	MGG8G86	CSXCR310
5558G77	CSXCR302	MGG8G87	CSXCR311
5558G78	CSXCR303	MGG8G88	CSXCR312
5558G79	CSXCR304	MGG8G89	CSXCR314
5558G80	CSXCR305	MGG8G90	CSXCR315
5558G81	CSXCR306	MGG8G91	CSXCR316
5558G82	CSXCR307	MGG8G92	CSXCR317

And 13 associated QC samples CSXCR915A,C,M, -219L,S,R, -220L,S,R, -301L,S,R, and -309D

GENERAL

This data review assignment covers Twenty Water samples analyzed for total metals No field blank and one field duplicate, and 13 associated QC samples were included in this assignment Chain-of-custody paperwork is complete, although sample tags were absent

1 Holding Times and Preservation

A Holding time requirements and preservation requirements were met for these metals analyses

2 Calibration

A Calibration criteria were met for all samples, for both initial and continuing calibrations

3 Method Blanks / Field Blanks

Matrix	Sample #	Analytes Detected	Samples Qualified as non-detect
Water	Laboratory Blanks	Sb, As, Ca, Cr, Cu, Fe, Tl	Sb in CSXCR316 Cu in CSXCR312, -314, and -317

4 Matrix Spike Met applicable criteria

5 Interference Check Sample Met applicable criteria

6 Laboratory Control Sample Met applicable criteria

7 Duplicates

A Lab duplicates met applicable criteria, indicating acceptable precision was obtained during these analyses, except for high RPD noted for Lead in CSXCR220L, leading to "J" coding of detected values, the only affected sample is CSXCR308, others are all nondetect for Pb

B Field duplicates CSXCR009 / -009D generally exhibited good agreement, except for Ni, however, the lack of agreement was not sufficient to result in "J" data coding of Ni data

8 **ICP Serial Dilution**

A All applicable criteria were met

9 **Furnace AA QC**

A Correlation coefficients for samples analyzed by method of standard additions were unacceptable for As and Pb in several samples, "J" data qualification resulted only for Pb in CSXCR305, however, as the other affected samples were nondetect Post-digestion spike outliers did not result in any data coding as affected results were nondetect

10 **Calculations Verification**

A Due to the requested level of review, no detailed examination of calculations was performed

B Per regional guidance, low level detected data below the Contract Required Detection Limit (CRDL) were reported as nondetect at the CRDL, including in blank samples

Summary

This data package is acceptable in terms of requirements for overall accuracy, precision and completeness, although individual outliers resulted in qualification of data as nondetect or as "J" coded in some cases

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TO Debra Morey
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THRU Harold Brown, Ph D
ESAT Deputy Project Officer, EPA

FROM D Eric Woodland
ESAT Data Reviewer
THRU Ronald A Ross
ESAT Team Manager

DATE August 21, 1990
SUBJECT Review of inorganic data for Big River Mine Tailings

TID# 07-9003-329
ASSIGNMENT# 567
ICF ACCT# 26-329-02
NSI S O # 4633-3292
ESAT Document # ESAT-VII 329-05 23-90-09

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," July 1988 revision with changes given in the Region VII Inorganic Data Review Training Manual and EPA memorandums

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory

CASE NO 5558G
SITE Big River Mine Tailings
REVIEWER D Eric Woodland

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR
MATRIX WATER

TOTAL METALS		TOTAL METALS	
SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G53	CSXCR200	5558G63	CSXCR210
5558G54	CSXCR201	5558G64	CSXCR211
5558G55	CSXCR202	5558G65	CSXCR212
5558G56	CSXCR203	5558G66	CSXCR213
5558G57	CSXCR204	5558G67	CSXCR214
5558G58	CSXCR205	5558G68	CSXCR215
5558G59	CSXCR206	5558G69	CSXCR216
5558G60	CSXCR207	5558G70	CSXCR217
5558G61	CSXCR208	5558G71	CSXCR218
5558G62	CSXCR209	5558G72	CSXCR219

GENERAL

This data review assignment covers TWENTY WATER samples analyzed for TOTAL METALS for case number 5558G There were no field blanks, duplicates or performance samples included with this assignment

1. Technical Holding Times / Preservation

Technical holding times were within established control limits

2 Initial and Continuing Calibration

All percent recoveries were within control limits

3 Blanks

Several analytes were detected in the blanks Corresponding sample results were qualified according to the blank rule using five times the highest blank value Sample results requiring modification are reported as non-detect on the attached data sheets

TOTAL METALS

Analyte	5 x Highest Blank (ug/l)	Qualified Samples
Al	440	CSXCR201,-203 to -206,-208 to -210, -214,-217 and -219
Sb	160	None qualified
Be	7 0	None qualified
Cd	22	CSXCR202
Cr	29	CSXCR218
Cu	44	None qualified
Fe	120	None qualified
Ni	140	None qualified
Zn	38	CSXCR218
As	10	None qualified
Ca	340	None qualified
Mg	320	None qualified

4 ICP Interference Check

Recoveries of solution AB analytes were within control limits

5 Laboratory Control Standard (LCS)

LCS results were within established control limits

6 Duplicates

The RPDs for all analytes were within control limits

7 **Matrix Spike Sample**

Matrix spike recoveries were within established control limits

8 **ICP Serial Dilution**

All results were within established control limits

9 **Summary**

Several results were qualified by the blank rule No other qualifications were made

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THRU Harold Brown, Ph D
ESAT Deputy Project Officer, EPA

FROM D Eric Woodland
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THRU Ronald A Ross
ESAT Team Manager

DATE August 21, 1990
SUBJECT Review of inorganic data for Big River Mine Tailings

TID# 07-9003-329
ASSIGNMENT# 569
ICF ACCT# 26-329-02
NSI S O # 4633-3292
ESAT Document # ESAT-VII-B329-08-23 90 09

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," July 1988 revision with changes given in the Region VII Inorganic Data Review Training Manual and EPA memorandums

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory

CASE NO 5558G
SITE Big River Mine Tailings
REVIEWER D Eric Woodland

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR
MATRIX WATER

DISSOLVED METALS		TOTAL METALS	
SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G102	CSXCR219	5558G93	CSXCR318
5558G103	CSXCR220	5558G94	CSXCR319
5558G104	CSXCR300	5558G95	CSXCR320F
5558G105	CSXCR301	5558G96	CSXCR321F
5558G106	CSXCR302	5558G97	CSXCR322F
5558G107	CSXCR303	5558G98	CSXCR323F
5558G108	CSXCR304	5558G99	CSXCR324
5558G109	CSXCR305	5558G100	CSXCR324F
5558G110	CSXCR306	5558G101	CSXCR325F
5558G111	CSXCR307		
5558G112	CSXCR308		

GENERAL

This data review assignment covers ELEVEN WATER samples analyzed for DISSOLVED METALS and NINE WATER samples analyzed for TOTAL METALS for case number 5558G There were six field blanks for TOTAL METALS and no field duplicates or performance samples included with this assignment

1 Technical Holding Times / Preservation

Technical holding times were within established control limits

2 Initial and Continuing Calibration

All percent recoveries were within control limits

3 Blanks

Several analytes were detected in the blanks Corresponding sample results were qualified according to the blank rule using five times the highest blank value Sample results requiring modification are reported as non-detect on the attached data sheets

DISSOLVED METALS

Analyte	5 x Highest Blank (ug/l)	Qualified Samples
Cu	41	None qualified
Fe	110	None qualified
Pb	8 0	CSXCR300,-302 and -303
Zn	24	None qualified
Al	200	None qualified
Co	44	None qualified

TOTAL METALS

Analyte	5 x Highest Blank (ug/l)	Qualified Samples
Cu	41	None qualified
Fe	400	CSXCR318 and -319
Pb	16	None qualified
Al	200	None qualified
Co	44	None qualified
Ca	3300	None qualified
Mg	1000	None qualified
Na	3400	None qualified
Tl	11	None qualified
Zn	130	None qualified
Mn	16	None qualified

4 **ICP Interference Check**

Recoveries of solution AB analytes were within control limits

5 **Laboratory Control Standard (LCS)**

LCS results were within established control limits

6 **Duplicates**

The RPDs for all analytes were within control limits

7 **Matrix Spike Sample**

The matrix spike results were applied to the total and dissolved sample results Pb Se and Tl were out of control limits for matrix spike recovery All Se and Tl results were non-detect, so no coding was performed for these analytes CSXCR318,-319,-322F and 324 were coded J for TOTAL PB and CSXCR219,-220,-301,-304,-306 and -307 were J coded for DISSOLVED PB All other TOTAL and DISSOLVED PB results were invalidated

8 **ICP Serial Dilution**

All results were within established control limits

9 **Furnace Criteria**

CSXCR318 was J coded for a MSA correlation coefficient outlier This results was also coded by matrix spike recovery

10 **Summary**

All Pb results were either J coded or invalidated by the matrix spike recovery Two results for TOTAL Fe were qualified by the blank rule Several DISSOLVED Pb results were qualified by the blank rule and later invalidated by matrix spike recovery CSXCR318 was also coded by MSA correlation coefficient

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FROM D Eric Woodland
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THRU Ronald A Ross
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DATE August 21, 1990
SUBJECT Review of inorganic data for Big River Mine Tailings

TID# 07-9003-329
ASSIGNMENT# 568
ICF ACCT# 26-329-02
NSI S O # 4633-3292
ESAT Document # ESAT-VII-329-08-21-90-10

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," July 1988 revision with changes given in the Region VII Inorganic Data Review Training Manual and EPA memorandums

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory

CASE NO 5558G
SITE Big River Mine Tailings
REVIEWER D Eric Woodland

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR
MATRIX WATER

DISSOLVED METALS		DISSOLVED METALS	
SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G113	CSXCR309	5558G123	CSXCR319
5558G114	CSXCR309D	5558G124	CSXCR321F
5558G115	CSXCR310	5558G125	CSXCR200
5558G116	CSXCR311	5558G126	CSXCR201
5558G117	CSXCR312	5558G127	CSXCR202
5558G118	CSXCR314	5558G128	CSXCR203
5558G119	CSXCR315	5558G129	CSXCR204
5558G120	CSXCR316	5558G130	CSXCR205
5558G121	CSXCR317	5558G131	CSXCR206
5558G122	CSXCR318	5558G132	CSXCR207

GENERAL

This data review assignment covers TWENTY WATER samples analyzed for DISSOLVED METALS for case number 5558G There was one field duplicate and no field blanks or performance samples included with this assignment

1 Technical Holding Times / Preservation

Technical holding times were within established control limits

2 Initial and Continuing Calibration

All percent recoveries were within control limits

3 Blanks

Several analytes were detected in the blanks Corresponding sample results were qualified according to the blank rule using five times the highest blank value Sample results requiring modification are reported as non-detect on the attached data sheets

DISSOLVED METALS

Analyte	5 x Highest Blank (ug/l)	Qualified Samples
Ca	2600	None qualified
Cr	22	None qualified
Cu	41	None qualified
Tl	12	None qualified
Ag	10	None qualified
Pb	7 0	CSXCR207 -204,-309,-309D and 319
Mg	700	None qualified
Na	2100	None qualified

4 ICP Interference Check

Recoveries of solution AB analytes were within control limits

5 Laboratory Control Standard (LCS)

LCS results were within established control limits

6 Duplicates

The RPDs for all analytes were within control limits

7 Matrix Spike Sample

Se was out of control limits for matrix spike recovery All results for Se were non-detect, so no coding was performed

8 ICP Serial Dilution

All results were within established control limits

9 Summary

Several Pb results were qualified by the blank rule No other qualifications were made

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FROM D Eric Woodland
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ESAT Team Manager

DATE August 21, 1990
SUBJECT Review of inorganic data for Big River Mine Tailings

TID# 07-9003-329
ASSIGNMENT# 566
ICF ACCT# 26-329-02
NSI S O # 4633-3292
ESAT Document # ESAT-VII-329-08-23-90-04

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," July 1988 revision with changes given in the Region VII Inorganic Data Review Training Manual and EPA memorandums

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory

CASE NO 5558G
SITE Big River Mine Tailings
REVIEWER D Eric Woodland

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR
MATRIX AIR

TOTAL METALS

SMO Sample No	EPA Sample No
5558G192	CSXCR400
5558G193	CSXCR402
5558G194	CSXCR403
5558G195	CSXCR404
5558G196	CSXCR406
5558G197	CSXCR407
5558G198	CSXCR408

GENERAL

This data review assignment covers SEVEN AIR samples analyzed for TOTAL METALS for case number 5558G There were no field blanks, duplicates or performance samples included with this assignment

1 Technical Holding Times / Preservation

Technical holding times have not been established for this matrix

2 Initial and Continuing Calibration

All percent recoveries were within control limits

3 Blanks

Several analytes were detected in the blanks Corresponding sample results were qualified according to the blank rule using five times the highest blank value Sample results requiring modification are reported as non-detect on the attached data sheets

TOTAL METALS

Analyte	5 x Highest Blank (ug/sample)	Qualified Samples
Al	74	CSXCR407
As	4 2	None qualified
Ca	80	None qualified
Cr	5 2	CSXCR406,-404 and -403
Cu	13	None qualified
Fe	18	None qualified
Mg	97	None qualified
Tl	3 0	None qualified
Pb	1 0	CSXCR408

4 ICP Interference Check

Recoveries of solution AB analytes were within control limits

5 Laboratory Control Standard (LCS)

LCS results were within established control limits

6 Duplicates

The RPDs for all analytes were within control limits

7 **Matrix Spike Sample**

Because of the matrix, matrix spikes of the samples are not possible A spike was performed on a blank These results were within regular CLP control limits

8 **ICP Serial Dilution**

Copper was outside control limits All results were J coded except for CSXCR408, which was non-detect

9 **Furnace Atomic Absorption**

CSXCR406 for Se was outside control limits for MSA correlation coefficient This result was J coded

10 **Summary**

One result was coded for MSA correlation coefficient outlier Most of the Cu results were J coded for a serial dilution outlier

U S ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL SERVICES ASSISTANCE TEAM -- Zone II

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TO Debra Morey
Data Review Task Monitor
THRU Harold Brown, Ph D
ESAT Deputy Project Officer, EPA

FROM D Eric Woodland
ESAT Data Reviewer
THRU Ronald A Ross
ESAT Team Manager

DATE August ~~21~~ 23 90, 1990
SUBJECT Review of inorganic data for Big River Mine Tailings
TID# 07-9003-329
ASSIGNMENT# 564
ICF ACCT# 26-329-02
NSI S O # 4633-3292
ESAT Document # ESAT-VII-329-08-23-90-06

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," July 1988 revision with changes given in the Region VII Inorganic Data Review Training Manual and EPA memorandums

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory

CASE NO 5558G
SITE Big River Mine Tailings
REVIEWER D Eric Woodland

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR
MATRIX AIR

TOTAL METALS		TOTAL METALS	
SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G148	CSXCR433	5558G158	CSXCR443
5558G149	CSXCR434	5558G159	CSXCR444
5558G150	CSXCR435	5558G160	CSXCR445
5558G151	CSXCR436	5558G161	CSXCR446
5558G152	CSXCR437	5558G162	CSXCR448
5558G153	CSXCR438	5558G163	CSXCR449
5558G154	CSXCR439	5558G168	CSXCR417
5558G155	CSXCR440	5558G169	CSXCR418
5558G156	CSXCR441	5558G170	CSXCR419
5558G157	CSXCR442	5558G171	CSXCR420

GENERAL

This data review assignment covers TWENTY AIR samples analyzed for TOTAL METALS for case number 5558G There were no field blanks, duplicates or performance samples included with this assignment

1 Technical Holding Times / Preservation

Technical holding times have not been established for this matrix

2 Initial and Continuing Calibration

All percent recoveries were within control limits

3 Blanks

Several analytes were detected in the blanks Corresponding sample results were qualified according to the blank rule using five times the highest blank value Sample results requiring modification are reported as non-detect on the attached data sheets

TOTAL METALS

Analyte	5 x Highest Blank (ug/sample)	Qualified Samples
Al	48	None qualified
Sb	28	None qualified
Be	1 6	None qualified
Ca	70	None qualified
Cu	7 3	None qualified
Fe	21	None qualified
Mg	65	None qualified
Tl	4 3	None qualified
V	5 5	None qualified

4 ICP Interference Check

Recoveries of solution AB analytes were within control limits

5 Laboratory Control Standard (LCS)

LCS results were within established control limits

6 Duplicates

The RPDs for all analytes were within control limits

7 **Matrix Spike Sample**

Because of the matrix, matrix spikes of the samples are not possible A spike was performed on a blank These results were within regular CLP control limits

8 **ICP Serial Dilution**

All results were within limits

9 **Furnace Atomic Absorption**

CSXCR420 for As and CSXCR434,-435 and -436 for Se were outside control limits for MSA correlation coefficient These results were J coded

10 **Summary**

Some results were coded for MSA correlation coefficient outliers No other QC outliers were found

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TO Debra Morey
Data Review Task Monitor
THRU Harold Brown, Ph D
ESAT Deputy Project Officer, EPA

FROM D Eric Woodland
ESAT Data Reviewer
THRU Ronald A Ross
ESAT Team Manager

DATE August ~~21~~ 23rd, 1990
SUBJECT Review of inorganic data for Big River Mine Tailings

TID# 07-9003-329
ASSIGNMENT# 565
ICF ACCT# 26-329-02
NSI S O # 4633-3292
ESAT Document # ESAT-VII-329-08-23-90-05

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses," July 1988 revision with changes given in the Region VII Inorganic Data Review Training Manual and EPA memorandums

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory

CASE NO 5558G
SITE Big River Mine Tailings
REVIEWER D Eric Woodland

LABORATORY SILVER
METHOD NO CS0788A
EPA ACTIVITY NO CSXCR
MATRIX AIR

TOTAL METALS		TOTAL METALS	
SMO Sample No	EPA Sample No	SMO Sample No	EPA Sample No
5558G172	CSXCR421	5558G182	CSXCR431
5558G173	CSXCR422	5558G183	CSXCR432
5558G174	CSXCR423	5558G184	CSXCR409
5558G175	CSXCR424	5558G185	CSXCR410
5558G176	CSXCR425	5558G186	CSXCR411
5558G177	CSXCR426	5558G187	CSXCR412
5558G178	CSXCR427	5558G188	CSXCR413
5558G179	CSXCR428	5558G189	CSXCR414
5558G180	CSXCR429	5558G190	CSXCR415
5558G181	CSXCR430	5558G191	CSXCR416

GENERAL

This data review assignment covers TWENTY AIR samples analyzed for TOTAL METALS for case number 5558G There were no field blanks, duplicates or performance samples included with this assignment

1 **Technical Holding Times / Preservation**

Technical holding times have not been established for this matrix

2 **Initial and Continuing Calibration**

All percent recoveries were within control limits

3 **Blanks**

Several analytes were detected in the blanks Corresponding sample results were qualified according to the blank rule using five times the highest blank value Sample results requiring modification are reported as non-detect on the attached data sheets

TOTAL METALS

Analyte	5 x Highest Blank (ug/sample)	Qualified Samples
Al	63	None qualified
Ca	57	None qualified
Cr	5 8	CSXCR428,-409 and -412
Cu	14	None qualified
Fe	29	CSXCR432
Zn	4 1	None qualified

4 **ICP Interference Check**

Recoveries of solution AB analytes were within control limits

5 **Laboratory Control Standard (LCS)**

LCS results were within established control limits

6 **Duplicates**

The RPDs for all analytes were within control limits

7 **Matrix Spike Sample**

Because of the matrix, matrix spikes of the samples are not possible A spike was performed on a blank These results were within regular CLP control limits

8 ICP Serial Dilution

Copper was outside control limits All results were J coded except for CSXCR424,-432 and -416, which were non-detect

9 Furnace Atomic Absorption

CSXCR425 for Se was outside control limits for MSA correlation coefficient This result was J coded

10 Summary

One result was coded for MSA correlation coefficient outliers Most of the Cu results were J coded for a serial dilution outlier